

THE PRINCIPLES
OF
SOCIOLOGY,

BY
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VOL. I.

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PREFACE TO VOL. I.

FOR the Science of Society, the name "Sociology" was introduced by M. Comte. Partly because it was in possession of the field, and partly because no other name sufficiently comprehensive existed, I adopted it. Though repeatedly blamed by those who condemn the word as a "barbarism," I do not regret having done so. To use, as some have suggested, the word "Politics," too narrow in its meaning as well as misleading in its connotations, would be deliberately to create confusion for the sake of avoiding a defect of no practical moment. Already our language is so heterogeneous that almost every sentence is made up of words derived from two or three languages; and already it has many words formed in irregular ways from heterogeneous roots. Seeing this, I accept without much reluctance, another such word, believing that the convenience and suggestiveness of our symbols are of more importance than the legitimacy of their derivation.

Probably some surprise will be felt that, containing as this work does multitudinous quotations from numerous authors, there are no references at the bottoms of pages. Some words of explanation seem needful. If foot-notes are referred to, the thread of the argument is completely broken; and even if they are not referred to, attention is disturbed by the consciousness that they are there to be looked at. Hence a loss of effect and a loss of time. As I

intended to use as data for the conclusions set forth in this work, the compiled and classified facts forming the *Descriptive Sociology*, it occurred to me that since the arrangement of those facts is such that the author's name and the race referred to being given, the extract may in each case be found, and with it the reference, it was needless to burden the bottoms of pages with these distracting foot-notes. I therefore decided to omit them. In so far as evidence furnished by the uncivilized races is concerned, (which forms the greater part of the evidence contained in this volume), there exists this means of verification in nearly all cases. I found, however, that many facts from other sources had to be sought out and incorporated; and not liking to change the system I had commenced with, I left them in an unverifiable state. I recognize the defect, and hope hereafter to remedy it. In succeeding volumes I propose to adopt a method of reference which will give the reader the opportunity of consulting the authorities cited, while his attention to them will not be solicited.

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With this No. 43, the issue of the *System of Synthetic Philosophy* to subscribers, ceases. the intention being to publish the remainder of it in volumes only. The next volume will, I hope, be completed before the close of 1879.

London, December, 1876.

CONTENTS OF VOL. I.

PART I —THE DATA OF SOCIOLOGY

CHAP	PAGE
I —SUPER-ORGANIC EVOLUTION	3
II —THE FACTORS OF SOCIAL PHENOMENA	9
III —ORIGINAL EXTERNAL FACTORS	17
IV.—ORIGINAL INTERNAL FACTORS	41
V.—THE PRIMITIVE MAN—PHYSICAL	44
VI.—THE PRIMITIVE MAN—EMOTIONAL	59
VII.—THE PRIMITIVE MAN—INTELLECTUAL	63
VIII —PRIMITIVE IDEAS	105
IX —THE IDEAS OF THE ANIMATE AND INANIMATE	138
X —THE IDEAS OF SLEEP AND DREAMS	147
XI —THE IDEAS OF SWOON, APOPLEXY, CATALEPSY, ECSTASY, AND OTHER FORMS OF INSENSIBILITY	158
XII.—THE IDEAS OF DEATH AND RESURRECTION	167
XIII —THE IDEAS OF SOULS, GHOSTS, SPIRITS, DEMONS	171
XIV.—THE IDEAS OF ANOTHER LIFE	171
XV.—THE IDEAS OF ANOTHER WORLD	171
XVI.—THE IDEAS OF SUPERNATURAL AGENTS	171
XVII.—SUPERNATURAL AGENTS AS CAUSES OF CONVULSIVE ACTIONS, DELIRIUM, AND ADDICTION, DISEASE AND DEATH	171
XVIII.—INSPIRATION, DIVINATION, AND IT HAS KINDS OF	171
XIX.—SACRED PLACES, TEMPLES, AND IT HAS KINDS OF	171
FASTING, AND PROPITIATION	171
XX —ANCESTOR-WORSHIP AND IT HAS KINDS OF	171
XXI.—IDOL-WORSHIP AND IT HAS KINDS OF	171
XXII.—ANIMAL-WORSHIP AND IT HAS KINDS OF	171

CHAP	PAGE
XXIII.—PLANT-WORSHIP	374
XXIV.—NATURE-WORSHIP	388
XXV.—DEITIES	414
XXVI.—THE PRIMITIVE THEORY OF THINGS	441
XXVII.—THE SCOPE OF SOCIOLOGY	454

PART II—THE INDUCTIONS OF SOCIOLOGY.

I.—WHAT IS A SOCIETY ?	465
II.—A SOCIETY IS AN ORGANISM	467
III.—SOCIAL GROWTH	481
IV.—SOCIAL STRUCTURES	489
V.—SOCIAL FUNCTIONS	504
VI.—SYSTEMS OF ORGANS	510
VII.—THE SUSTAINING SYSTEM	517
VIII.—THE DISTRIBUTING SYSTEM	525
IX.—THE REGULATING SYSTEM	539
X.—SOCIAL TYPES OF CONSTITUTIONS	569
XI.—SOCIAL METAMORPHOSES	597
XII.—QUALIFICATION AND SUMMARY	609

PART III—THE DOMESTIC RELATIONS

(pp. I.—THE MAINTENANCE OF SPECIES	621
September, DIVERSE U. 40 STS OF THE SPECIES, OF THE	
A & B) in BOOKS, 4er, 18 THE OFFSPRING	624
April, 1876; No. 42 (p-12 OF THE SEXES	631
No. 43 (pp. 625—704) 1 DOGAMY	641
With this No. 43, the	661
Philosophy to subscribers,	672
publish the remainder of it	682
volume will, I hope, be complet	698

London, December, 1876.

PART I.

THE DATA OF SOCIOLOGY.

CHAPTER I.

SUPER-ORGANIC EVOLUTION.

§ 1. Of the three broadly-distinguished kinds of Evolution, we come now to the third. The first kind, Inorganic Evolution, which, had it been dealt with, would have occupied two volumes, one dealing with Astrogeny and the other with Geogeny, was passed over because it seemed undesirable to postpone the more important applications of the doctrine for the purpose of elaborating those less important applications which logically precede them. The four volumes that have followed *First Principles*, have dealt with Organic Evolution: two of them with those physical phenomena presented by living aggregates, vegetal and animal, of all classes; and the other two with those more special phenomena distinguished by psychical, which the most evolved organic aggregates display. We have now to enter upon the remaining classes of Super-organic Evolution.

Although this word is descriptive, and ~~which~~, how-
Principles, § 111, I have used it with an example, in addi-
 tence, it will be proper here to exhibit its meaning and it has
 fully. ~~two kinds of~~

fully.

§ 2. While we are occupied with the fact, besides the making six un-
an individual organism during its growth, it exhibits various varieties of forms
decay, we are studying Organic Evolution for workers and

account, as we must, the actions and reactions going on between this organism and organisms of other kinds which its life puts it in relation with, we still do not go beyond the limits of Organic Evolution. Nor need we consider that we exceed these limits on passing to those groups of facts which the rearing of offspring frequently shows us; though here, in parental co-operation, we see the germ of a new order of phenomena. While recognizing the fact that the joint actions of parents in fostering their young, foreshadow processes of a class beyond the simply organic, and while recognizing the fact that some of the products of these joint actions, such as nests, must be taken as foreshadowing products of the super-organic class, we may fitly regard Super-organic Evolution as commencing only when there arises something more than the combined efforts of parents. There can of course be no absolute separation. If there has been Evolution, that form of it here distinguished as super-organic must have arisen by insensible steps out of the organic. But we may conveniently mark it off as including all those processes and products which imply the co-ordinated actions of many individuals—co-ordinated actions which achieve results exceeding in extent and complexity those achievable by individual actions.

There exist various groups of super-organic phenomena, of which certain minor ones may be briefly noticed here by B) in illustration.

1, 1876; 43 (pp. 625—) which the most familiar, and in some respects the most important, are furnished by the social insects. The philosophy to be derived from these shows us co-operation, with, in the remainder, considerable division of labour; as well as profound will, I hope, to extend far beyond any that would be possible in the absence of united efforts.

London, December, 1876, to particularize these truths, as shown in the preceding. I know that these form (though, I see, only in a qualified sense) com-

munities—communities such that the units and the aggregates stand in very definite relations. Between the individual organization of the hive-bee and the organization of the hive as an orderly aggregate of individuals with a regularly-formed habitation, there exists a fixed connexion. Just as the germ of a wasp evolves into a complete individual, so does the adult queen-wasp, the germ of a wasp-society, evolve into a multitude of individuals with definitely-adjusted arrangements and activities. That is to say, the growths and developments of these social aggregates have analogies with the growths and developments of the individual aggregates. Though the structures and functions shown us by the community are less specific than those shown us by the individual, yet they are specific in a considerable degree. As evidence that Evolution of this order has here arisen after the same manner as the simpler orders of Evolution, it may be added that, among both bees and wasps, different genera exhibit it in different degrees. From kinds that are solitary in their habits, we pass through kinds that are social in small degrees to kinds that are social in great degrees.

Among some species of ants the process of Super-organic Evolution is carried much further—some species, I say; for here, also, we find that unlike stages have been reached by unlike species. the societies they form vary immensely, both in size and complexity. Among the most advanced, division of labour is carried so far that different classes of individuals are structurally adapted to different functions. Sometimes, as among the white ants, or *termites* (which, however, belong to a different order of insects), there are, in addition to males and females, soldiers and workers; and it has recently been shown that there are in some cases two kinds of males and females, winged and unwinged: making six unlike forms. Among the *Sauba* ants there are, besides the two developed sexual forms, three varieties of forms sexually undeveloped—one class of in-door workers and

two classes of out-door workers. Beyond the division of labour among individuals of the community thus diversely constructed, we find, in some cases, a further division of labour achieved by making slaves of other ants. We see, also, that there is a tending of other insects, sometimes for the sake of their secretions and sometimes for unknown purposes; so that, as Sir John Lubbock points out, some ants keep more domestic animals than are kept by mankind. To which we must add that among members of these communities, there is a system of signalling equivalent to a rude language, and that there are elaborate processes of mining, road-making, and building—building of which the methodical character may be judged from the statement of Tuckey, who, in Congo, “found a complete banza [village] of ant-hills, placed with more regularity than the native banzas”; or from the statement of Schweinfurth, who says a volume would be required to describe the magazines, chambers, passages, bridges, contained in a *termites*-mound.

But, as hinted above, though social insects exhibit a kind of evolution much higher than the merely organic—though the aggregates they form simulate social aggregates in sundry ways; yet they are not true social aggregates. The evolution we see in them is, in essential respects, intermediate between the organic and the super-organic, as here to be understood. For each of these societies is in reality a large family. It is not a union among like individuals substantially independent of one another in parentage, and approximately equal in their capacities; but it is a union among the offspring of one mother, carried on, in some cases, for a single generation and in some cases for more; and from this community of parentage *arises the possibility of classes having unlike structures and consequent unlike functions*. Instead of being allied to the specialization of function which arises in a society, properly so called, the specialization of function which arises in one of these large and complicated insect-families, is allied to that which habitually

arises between the sexes. For instead of two kinds of individuals descending from the same parents, there are several kinds of individuals descending from the same parents; and instead of a simple co-operation between two differentiated individuals in the rearing of offspring, there is an involved co-operation among sundry differentiated classes of individuals in the rearing of offspring.

§ 4. The only true rudimentary forms of Super-organic Evolution are those to be found among certain of the higher types of vertebrata.

Some birds form communities in which, beyond mere aggregation, there is a small amount of co-ordination. Rooks furnish the most familiar instance. Among these we see such integration as is implied by the keeping-together of the same families from generation to generation, and by the exclusion of strangers. There is some rude form of government, some recognition of proprietorship, some punishment of offenders, and occasionally expulsion of them. A slight specialization is shown in the stationing of sentinels while the flock feeds. And there is usually an orderly action of the whole community in respect of times of going and coming. Clearly there has been reached a co-operation comparable in degree to that shown us by those small assemblages of the lowest human beings, in which there exist no governments.

Gregarious mammals of most kinds display little more than the union of mere association. In the common tendency towards supremacy of the strongest male in the herd, we do, indeed, see a faint trace of governmental organization. Some degree of co-operation is shown, for offensive purposes, by animals that hunt in packs, and for defensive purposes by animals that are hunted; as, according to Ross, by the North American buffaloes, the bulls of which assemble to guard the cows during the calving-season against wolves, bears, or other enemies. Certain gregarious mammals,

however, as the beavers, carry social co-operation to a considerable extent; and their joint actions yield remarkable products in the shape of habitations. Finally, among sundry of the *Primates*, gregariousness is joined with some subordination, some combination, some display of the social sentiments. There is obedience to leaders; there is union of efforts; there are sentinels and signals, there is some idea of property, there is some exchange of services; there is adoption of orphans, and anxiety prompts the community at large to make efforts on behalf of endangered members.

§ 5. These classes of truths, which, by one having adequate knowledge, might be enlarged upon to much purpose, I have here set down and illustrated for several reasons. Partly it seemed needful to point out that beyond organic evolution, there tends to arise in various directions a further and higher order of evolution. Partly, my object has been to give a comprehensive conception of this Super-organic Evolution, as not of one kind but of various kinds, determined by the characters of the various species of organisms among which it shows itself. And partly, the facts have been referred to with the view of suggesting that Super-organic Evolution of the highest order, arises out of an order no higher than that variously displayed in the animal world at large.

Having observed thus much, we may henceforth restrict ourselves to that form of Super-organic Evolution which so immensely transcends all others in extent, in complication, in importance, as to make them relatively insignificant—almost too insignificant to be named at the same time. I refer, of course, to the form of it which human societies exhibit in their growths, structures, functions, products. To the phenomena comprised in these, and grouped under the general title of Sociology, we now pass.

CHAPTER II.

THE FACTORS OF SOCIAL PHENOMENA.

§ 6. THE behaviour of a single inanimate object depends on the co-operation between its own forces and the forces to which it is exposed : instance a piece of metal, the molecules of which keep the solid state or assume the liquid state, according partly to their natures and partly to the heat-waves falling on them. Similarly with any group of inanimate objects. Be it a cart-load of bricks shot down, a barrowful of gravel turned over, or a boy's bag of marbles emptied, the behaviour of the assembled masses—here standing in a heap with steep sides, here forming one with sides much less inclined, and here spreading out and rolling in all directions—is in each case determined partly by the properties of the individual members of the group, and partly by the forces of gravitation, impact, and friction, they are jointly and individually subjected to.

It is equally so when the discrete aggregate consists of organic bodies, such as the members of a species. For a species increases or decreases in numbers, widens or contracts its habitat, migrates or remains stationary, continues an old mode of life or falls into a new one, under the combined influences of its intrinsic nature and the environing actions, inorganic and organic.

It is thus, too, with aggregates of men. Be it rudimentary or be it advanced, every society displays phenomena

that are ascribable to the characters of its units and to the conditions under which they exist. Here, then, are the factors as primarily divided.

§ 7. These factors are re-divisible. Within each there are groups of factors that stand in marked contrasts.

Beginning with the extrinsic factors, we see that from the outset several kinds of them are variously operative. They need but barely enumerating. We have climate, hot, cold, or temperate, moist or dry, constant or variable. We have surface, much or little of which is available, and the available part of which is fertile in greater or less degree; and we have configuration of surface, as uniform or multi-form. Next we have the vegetal productions, here abundant in quantities and kinds, and there deficient in one or both. And besides the Flora of the region we have its Fauna, which is highly influential in many ways; not only by the numbers of its species and individuals, but by the proportion between those that are useful and those that are injurious. On these sets of conditions, inorganic and organic, characterizing the environment, primarily depends the possibility of social evolution.

When we turn to the intrinsic factors we have to note, first, that, considered as a social unit, the individual man has physical characters which are potent in determining the growth and structure of the society. He is in every case more or less distinguished by emotional characters which aid, or hinder, or modify, the activities of the society, and the developments accompanying them. Always, too, his degree of intelligence and the tendencies of thought peculiar to him, become co-operating causes of social quiescence or social change.

Such being the original sets of factors, we have now to note the secondary or derived sets of factors, which social evolution itself brings into play.

§ 8. First may be set down the progressive modifications

of the environment, inorganic and organic, which the actions of societies effect.

Among these are the alterations of climate caused by clearing and by drainage. Such alterations may be favourable to social growth, as where a rainy region is made less rainy by cutting down forests, or a swampy surface rendered more salubrious and fertile by carrying off water* ; or they may be unfavourable, as where, by destroying the forests, a region already dry is made arid witness the seat of the old Semitic civilizations, and, in a less degree, Spain.

Next come the changes wrought in the kind and quantity of plant-life over the surface occupied. These changes are three-fold. There is the increasing substitution of plants conducive to social growth, for plants not conducive to it ; there is the gradual production of better varieties of these useful plants, causing, in time, extreme divergences from their originals ; and there is, eventually, the introduction of new useful plants

Simultaneously go on the kindred changes which social progress works in the Fauna of the region. We have the diminution or destruction of some or many injurious species. We have a fostering of useful species, which has the double effect of increasing their numbers and making their qualities more advantageous to society. Further, we have the naturalization of desirable species, brought from abroad.

It needs but to think of the immense contrast between a wolf-haunted forest or a boggy moor peopled with wild

* It is worth noting that the effect of drainage is to increase what we may figuratively call terrestrial respiration ; and that on terrestrial respiration the lives of land plants, and therefore of land-animals, and therefore of men, depend. Every change of atmospheric pressure produces, from day to day, exits or entrances of the air into all the interstices of the soil. The depth to which these irregular inspirations and expirations reach, is increased by freedom from water ; since interstices occupied by water cannot be filled by air. Thus those chemical decompositions effected by the air that is renewed with every fall and rise of the barometer, are extended to a greater depth by drainage, and the plant-life depending upon these decompositions is therefore facilitated

birds, and the fields covered with crops and flocks which eventually occupy the same area, to be reminded that the environment, inorganic and organic, of a society, undergoes a continuous transformation of a remarkable kind during the progress of the society; and that this transformation becomes an all-important secondary factor in social evolution.

§ 9. Another secondary factor which must not be overlooked, is the increasing size of the social aggregate, accompanied, generally, by increasing density.

Apart from social changes otherwise produced, there are social changes produced by simple growth. Mass is both a condition to, and a result of, organization in a society. It is clear that heterogeneity of structure is made possible only by multiplicity of units. Division of labour cannot be carried far where there are but few to divide the labour among them. There can be no differentiation into classes in the absence of numbers. Complex co-operations, governmental and industrial, are impossible without a population large enough to supply many kinds and gradations of agents. And sundry developed forms of activity, both predatory and peaceful, are made practicable only by the power which large masses of men furnish.

Hence, then, a derivative factor which, like the rest, is at once a consequence and a cause of social progress, is social growth, considered simply as accumulation of numbers. Other factors co-operate to produce this, and this joins other factors in working further changes.

§ 10. The next secondary or derivative factor to be noted, is the reciprocal influence of the society and its units—the influence of the whole on the parts, and of the parts on the whole.

As soon as a social combination acquires some permanence, there begin actions and reactions between the so-

ciety as a whole and each member of it, such that either affects the nature of the other. The control exercised by the aggregate over its units, is one tending ever to mould their activities and sentiments and ideas into congruity with social requirements, and these activities, sentiments, and ideas, in so far as they are changed by changing circumstances, tend to re-mould the society into congruity with themselves.

In addition, therefore, to the original nature of the individuals and the original nature of the society they form, we have to take into account the induced natures of the two. Superposed modifications are continually undergone by the units, and the altered units are ever superposing modifications of social structure on the previous modifications. Eventually this co-operation becomes a potent cause of transformation in both.

§ 11. Yet a further derivative factor of extreme importance remains. I mean the influence of the super-organic environment—the action and reaction between a society and neighbouring societies.

While there exist nothing but small, wandering assemblages of men, devoid of organization, the conflicts of these assemblages with one another cannot work changes of structure. But when once there have arisen the definite chieftainships which these conflicts themselves tend to initiate, and especially when the conflicts have ended in permanent subjugations, there arise the rudiments of political organization; and, as at first, so afterwards, the wars of societies with one another have all-important effects in developing the social structure, or rather, one moiety of it. For I may here, in passing, briefly indicate the fact to be hereafter exhibited in full, that while the industrial organization of a society is mainly determined by its inorganic and organic environments, its governmental organization is mainly determined by its super-organic environment—by

the actions of those adjacent societies with which it carries on the struggle for existence

§ 12. There remains in the group of derived factors one more, the potency of which can scarcely be over-estimated. I mean that accumulation of super-organic products which we commonly distinguish as artificial, but which, philosophically considered, are no less natural than all others resulting from evolution. There are several orders of these.

First come the material appliances, which, beginning with roughly-chipped flints, end in the complex automatic tools of an engine-factory driven by steam; which from boomerangs rise to thirty-five ton guns; which from huts of branches and grass grow to cities with their palaces and cathedrals.

Then we have language, able at first only to eke out gestures in communicating simple ideas, but eventually becoming capable of expressing highly-complex conceptions with precision. While from that stage in which it conveys thoughts only by sounds to one or a few other persons, we pass through picture-writing up to steam-printing: multiplying indefinitely the numbers communicated with, and making accessible in voluminous literatures the ideas and feelings of innumerable men in various places and times.

Concomitantly there goes on the development of knowledge, ending in science. Counting on the fingers grows into far-reaching mathematics; observation of the moon's changes leads at length to a theory of the solar system; and at successive stages there arise sciences of which not even the germs can at first be detected.

Meanwhile the once few and simple customs, becoming more numerous, definite, and fixed, end in systems of laws. From a few rude superstitions there grow up elaborate mythologies, theologies, cosmogonies. Opinion getting embodied in creeds, gets embodied, too, in accepted codes of propriety, good conduct, ceremony, and in established social sentiments. And then

there gradually evolve also the products we call æsthetic; which of themselves form a highly-complex group. From necklaces of fish-bones we advance to dresses elaborate, gorgeous, and infinitely varied; out of discordant war-chants come symphonies and operas; cairns develop into magnificent temples; in place of caves with rude markings there arise at length galleries of paintings; and the recital of a chief's deeds with mimetic accompaniment gives origin to epics, dramas, lyrics, and the vast mass of poetry, fiction, biography, and history.

All these various orders of super-organic products, each evolving within itself new genera and species while daily growing into a larger whole, and each acting upon the other orders while reacted upon by them, form together an immensely-voluminous, immensely-complicated, and immensely-powerful set of influences. During social evolution these influences are ever modifying individuals and modifying society, while being modified by both. They gradually form what we may consider either as a non-vital part of the society itself, or else as an additional environment, which eventually becomes even more important than the original environments—so much more important that there arises the possibility of carrying on a high type of social life under inorganic and organic conditions which originally would have prevented it.

§ 13. Such are the factors in outline. Even when presented under this most general form, the combination of them is seen to be of a complicated kind.

Recognizing the primary truth that social phenomena depend in part on the natures of the individuals and in part on the forces the individuals are subject to, we see that these two fundamentally-distinct sets of factors, with which social changes commence, become progressively involved with other sets as social changes advance. The pre-established environing influences, inorganic and organic,

which are at first almost unalterable, become more and more altered by the actions of the evolving society. Simple growth of population as it goes on, brings into play fresh causes of transformation that are increasingly important. The influences which the society exerts on the natures of its units, and those which the units exert on the nature of the society, incessantly co-operate in creating new elements. As societies progress in size and structure, they work in one another, now by their war-struggles and now by their industrial intercourse, profound metamorphoses. And the ever-accumulating, ever-complicating super-organic products, material and mental, constitute a further set of factors, which become more and more influential causes of change. So that, involved as the factors are at the beginning, each step in advance increases the involution, by adding factors which themselves grow more complex while they grow more powerful.

But now that we have glanced at the factors of all orders, original and derived, we must neglect for the present those which are derived, and attend exclusively, or almost exclusively, to those which are original. The Data of Sociology, here to be dealt with, we must, as far as possible, restrict to those primary data common to social phenomena in general, and most readily distinguished in the simplest societies. Adhering to the broad division made at the outset between the extrinsic and intrinsic co-operating causes, we will consider first the extrinsic.

CHAPTER III.

ORIGINAL EXTERNAL FACTORS.

§ 14. A COMPLETE outline, or anything like a complete outline, of the original external factors, implies a knowledge of the past which we have not got, and are not likely to get. Now that geologists and archæologists are uniting to prove that human existence goes back to a date so remote that "pre-historic" scarcely expresses it—now that imbedded traces of human handiwork show us that, not only sedimentary deposits of considerable depths and subsequent extensive denudations, but also immense changes in the distribution of land and sea, have occurred since the rudest social groups were formed; it is clear that the effects of external conditions on social evolution cannot be fully traced. Remembering that the 20,000 years, or so, during which man has lived in the Nile-valley, is made to seem a relatively-small period by the evidence that he coexisted with the great pachyderms and other extinct mammals of the drift—remembering that England had human inhabitants at an epoch which some judges think was glacial—remembering that in America, along with the bones of the *Mastodon* imbedded in the alluvium of the Bourbense, were found arrow-heads and other traces of the savages who had killed this member of an order no longer represented in that part of the world—remembering that, judging from the evidence

as interpreted by Professor Huxley, those vast subsidences which changed a continent into the Eastern Archipelago, took place after the Negro-race was established as a distinct variety of man, we must infer that it is hopeless to trace back the external factors of social phenomena to anything like their first forms.

One important truth only, implied by the evidence thus glanced at, must be noted. Geological changes and meteorological changes, as well as the consequent changes of Floras and Faunas, must have been causing over all parts of the Earth, perpetual emigrations and immigrations. From each locality made less habitable by increasing inclemency, a wave of diffusion must have spread; into each locality made more favourable to human existence by amelioration of climate, or increase of indigenous food, or both, a wave of concentration must have been set up, and by great geological changes, here sinking areas of land and there raising areas, other movements of local human races must have been produced. Continually-accumulating facts show us that these enforced ebbings and flowings have, in some localities, and probably in most, taken place time after time. And such waves of emigration and immigration, brought about by numerous causes having many varieties and complexities, occurring here at long intervals and there at short, and constituted now by descendants from the original inhabitants and now by men of another ancestry, must have been ever bringing the dispersed groups of the race into contact with conditions more or less new.

Carrying with us this conception of the way in which the external factors, original in the widest sense, have co-operated throughout all past time, the further consideration of their effects must be limited to such as we have now before us.

§ 15. Life in general is possible only between certain limits of temperature, and life of the higher kinds is possible only within a comparatively-narrow range of temperature, main-

tained artificially if not naturally. Hence it results that social life, pre-supposing as it does not only human life, but that life vegetal and animal on which human life depends, is restricted by certain extremes of cold and heat.

Cold, though great, does not rigorously exclude warm-blooded creatures, if the locality supplies in adequate quantity the means of generating heat. The arctic Fauna contains various marine and terrestrial mammals, large and small; but the existence of these depends, directly or indirectly, on the existence of the inferior marine creatures, vertebrate and invertebrate, which would cease to live there did not the warm currents from the tropics check the formation of ice. Hence such human life as we find in arctic regions, dependent as it is mainly on that of these mammals, is also remotely dependent on the same source of heat.

Here the fact we have to note is that, where the temperature which man's vital functions require can be maintained with difficulty, social evolution is not possible. There can be neither a sufficient surplus-power in each individual nor a sufficient number of individuals. Not only are the energies of the Esquimaux expended mainly in defending himself against loss of heat, and in laying up stores by which he may continue to do this during the arctic night; but his physiological processes are greatly modified to the same end. Without fuel, and, indeed, unable to burn within his snow-hut anything more than an oil-lamp, lest the walls should melt, he has to keep up that bodily warmth which even his thick fur-dress fails to retain, by devouring vast quantities of blubber and oil; and his digestive system, heavily taxed in providing the wherewith to meet excessive loss by radiation, supplies less material for other vital purposes. This great physiological cost of individual life, indirectly checking the multiplication of individuals, arrests social evolution. A kindred relation of cause and effect is shown us in the Southern hemisphere by the still-more-miserable Fuegians.

Living nearly unclothed in a region of continual storms of rain and snow, which their wretched dwellings of sticks and grass do not exclude, and having little food but fish and mollusks, these beings, described as scarcely human in appearance, have such difficulty in preserving the vital balance in face of the rapid escape of heat, that the surplus for individual development is narrowly restricted, and, by consequence, the surplus for producing and rearing new individuals. Hence the numbers remain too small for exhibiting anything beyond incipient social existence.

Though, in some tropical regions, an opposite extreme of temperature so far impedes the vital actions as to impede social development, yet hinderance from this cause seems exceptional and relatively unimportant. Life in general, and mammalian life along with it, is great in quantity as well as individually high, in localities that are among the hottest. The mertriness and silence during the noontide glare in such localities, do, indeed, furnish evidence of enervation; but in cooler parts of the twenty-four hours there is a compensating energy. And if it is true that varieties of the human race adapted to these localities, show us, in comparison with ourselves, some indolence, this does not seem greater than, or even equal to, the indolence of the primitive man in temperate climates. Contemplated in the mass, the facts do not countenance the current idea that great heat hinders progress. Many societies have arisen in hot climates, and in hot climates have reached large and complex growths. All our earliest recorded civilizations belonged to regions which, if not tropical, almost equal the tropics in height of temperature. India and Southern China, as still existing, show us great social evolutions within the tropics. And beyond this, the elaborate architectural remains of Java and of Cambodia yield proofs of other tropical civilizations in the East; while the extinct societies of Central America, Mexico, and Peru, need but be named to make it manifest

that in the New World, also, there were in past times great advances in hot regions.

It is thus, too, if we compare societies of ruder types that have developed in warm climates, with allied societies belonging to colder climates. Tahiti, the Tonga Islands, and the Sandwich Islands, are within the tropics; and in them, when first discovered, there had been reached stages of evolution that were remarkable considering the absence of metals. So that, though excessive heat hinders the vital actions, not only of man as at present constituted but of the mammalia generally, such heat hinders the evolution of bodily energy only during part of the day; and by the abundance of materials for living which it fosters, aids social development in most ways more than it impedes it in some ways.

I do not ignore the fact that in recent times societies have evolved most, both in size and complexity, in temperate regions. I simply join with this the fact that the first considerable societies arose, and the primary stages of social development were reached, in hot climates. Joining these two facts, the entire truth would seem to be that the earlier phases of progress had to be passed through where the resistances offered by inorganic conditions were least; that these phases having been passed through, and the arts of life having been advanced, it became possible for societies to develop in regions where the resistances were greater; and that further developments in the arts of life, and further discipline in co-operation going along with them, enabled societies inheriting the resulting advantages to take root and grow in regions which, by climatic and other conditions, offered relatively-great resistances.

Taking the most general view of the facts, we must therefore say that solar radiation, being the source of those forces by which life, vegetal and animal, is carried on; and being, by implication, the source of the forces displayed in human life, and consequently in social life; it results that there can be no considerable social evolution on tracts of the Earth's

surface where solar radiation is very feeble. We see that though, contrariwise, there is on some tracts a solar radiation in excess of the degree most favourable to vital actions; yet the consequent hindrance to social evolution is relatively small. Further, we conclude that an abundant supply of light and heat is requisite during those first stages of progress in which social vitality is small.

§ 16. Passing over such traits of climate as variability and equability, whether diurnal, annual, or irregular, all of which have their effects on human activities, and therefore on social phenomena, I will name here one other climatic characteristic that appears to be an important factor. I refer to the quality of the air in respect of dryness or moisture.

Either extreme brings indirect impediments to civilization, which we may here note before observing the more important direct effects. That great dryness of the air, causing a parched surface and a scanty vegetation, negatives the multiplication needed for advanced social life, is a familiar fact. And it is a fact, though not a familiar one, that extreme humidity, especially when joined with great heat, may raise unexpected obstacles to progress; as, for example, in some parts of East Africa (Zungomero), where, according to Captain Burton, "the springs of powder-flasks exposed to the damp snap like toasted quills; * * * paper, becoming soft and soppy by the loss of glazing, acts as a blotter; * * * metals are ever rusty; * * * and gunpowder, if not kept from the air, refuses to ignite."

But it is the direct effects of different hygrometric states, which must here be more especially set down—the effects on the vital processes, and, therefore, on the individual activities, and, through them, on the social activities. There is good reason, inductive and deductive, for believing that the bodily functions are facilitated by atmospheric conditions which make evaporation from the skin and lungs

tolerably rapid. That weak persons, whose variations of health furnish good tests, are worse when the air, surcharged with water, is about to precipitate, and are better when the weather is fine, and that such persons are commonly enervated by residence in moist localities but invigorated by residence in dry ones, are facts generally recognized. And this relation of cause and effect, manifest in individuals, is one which we may suspect holds in races—other things being equal. In temperate regions, differences of constitutional activity due to differences of atmospheric humidity, are less traceable than in torrid regions. the reason being that the inhabitants are subject to a tolerably-rapid escape of water from their surfaces; since the air, though well charged with water, will take up more when its temperature, previously low, is raised by contact with the body. But it is otherwise in tropical regions where the body and the air bathing it differ much less in temperature, and where, indeed, the air is often higher in temperature than the body. Here the rate of evaporation depends almost wholly on the quantity of surrounding vapour. If the air is hot and moist, the escape of water through the skin and lungs is greatly hindered; while it is greatly facilitated if the air is hot and dry. Hence in the torrid zone, we may expect constitutional differences between the otherwise-allied inhabitants of the low steaming tracts and the tracts which are habitually parched with heat. Needful as are cutaneous and pulmonary evaporation for maintaining the movement of fluids through the tissues and thus furthering molecular changes, it is to be inferred that, other circumstances being alike, there will be more bodily activity in the people of hot and dry localities than in the people of hot and humid localities.

The evidence, so far as we can disentangle it, justifies this inference. The earliest recorded civilization grew up in a hot and dry region—Egypt: and in hot and dry regions, also arose the Babylonian, Assyrian, and Phœnician civil-

zations. But the facts when stated in terms of nations are far less striking than when stated in terms of races. On glancing over the rain-map of the world, there will be seen an almost continuous area marked "rainless district," extending across North Africa, Arabia, Persia, and on through Thibet into Mongolia, and from within, or from the borders of, this district, have come all the conquering races of the Old World. We have the Tartar race, which, passing the Southern mountain-boundary of this rainless district, peopled China and the regions between it and India—thrusting the aborigines of these areas into the hilly tracts; and which has sent successive waves of invaders not into these regions only, but, from time to time, into the West. We have the Aryan race, overspreading India and making its way westward through Europe. We have the Semitic race, becoming dominant through North Africa, and, spurred on by Mahommedan fanaticism, conquering parts of Europe. That is to say, besides the Egyptian race, which, seeming by its alliances to have originally been of low type, became powerful in the hot and dry valley of the Nile, we have three races, widely unlike in type, and speaking languages classed as fundamentally distinct, which, from different parts of the rainless district have spread as invaders over regions relatively humid.

Original superiority of type was not the common trait of these races: the Tartar type is inferior, as well as the Egyptian. But the common trait, as proved by subjugation of other races, was energy. And when we see that this common trait in races otherwise unlike, had for its concomitant their long-continued subjection to these special climatic conditions—when we find further that from the region characterized by these conditions, the earlier waves of conquering emigrants, losing in moister countries their ancestral energy, were over-run by later waves of the same races, or of other races coming from this region; we get strong reason for inferring a relation between constitutional

vigour and the presence of an air which, by its warmth and dryness, facilitates the vital actions. A striking verification is at hand. On turning to the rain-map, it will be seen that of the entire New World, the largest of the parts distinguished by the absence of shade as almost rainless, is that Central-American and Mexican region in which indigenous civilizations developed; and that the only other rainless district is that which formed part of the ancient Peruvian territory—the part, moreover, in which the pre-Inca civilization has left its most conspicuous traces. Inductively, then, the evidence justifies in a remarkable manner the physiological deduction. Nor are there wanting minor verifications. Comparisons among African races are suggestive of similar contrasts in constitution, similarly caused. Of the varieties of negroes Livingstone remarks (*Miss. Trav.*, p. 78)—“Heat alone does not produce blackness of skin, but heat with moisture seems to insure the deepest hue;” and Schweinfurth, in his lately-issued *Heart of Africa*, similarly remarks on the relative blackness of the Denka and other tribes living on the alluvial plains, and contrasts them with “the less swarthy and more robust races who inhabit the rocky hills of the interior.” (Vol. I., p. 148.) There seem generally recognizable, corresponding differences in energy and social advance. But I note this difference of colour arising in the same race, between those subject to a moist heat and those subject to a dry heat, for the purpose of suggesting its probable connexion with the fact that the lighter-skinned races are habitually the dominant races. We see it to have been so in Egypt. It was so with the races spreading south from Central Asia. There is evidence that it was so in Central America and Peru. And if, heat being the same, darkness of skin accompanies humidity of the air, while relative lightness of skin accompanies dryness of the air, then, in this habitual predominance of the lighter-complexioned varieties of men, we find further

evidence: that constitutional activity, and in so far social development, is favoured by a climate conducing to rapid evaporation.

I do not mean that the energy thus resulting determines, of itself, higher social development: this is neither implied deductively nor shown inductively. But greater constitutional activity, making easy the conquest of less active races and the usurpation of their richer and more varied habitats, also makes possible a utilization of such habitats that was not possible to the aborigines.

§ 17. On passing from climate to surface, we have to note, first, the effects of its configuration, as favouring or hindering social integration—aiding or preventing subordination to a central power.

That the habits of men, originally hunters or nomads, may be changed into those required for settled communities, the surface occupied must be one within which coercion is easy, and beyond which the difficulties of existence are considerable. The successful resistances made by mountain tribes, due to the difficulties of pursuit, have been in many times and in many places exemplified. Instance the Illyrians, who remained independent of the adjacent Greeks, gave trouble to the Macedonians, and mostly recovered their independence after the death of Alexander; instance the Swiss; instance, more recently, the people of the Caucasus. The inhabitants of desert tracts, as well as those of mountain-tracts, are difficult to consolidate: facility of escape, joined with habits of life adapted to sterile regions, greatly hinder social subordination.

Within our own island we have seen that surfaces otherwise very different, have similarly hindered political integration, when their physical traits have made it difficult to get at their occupants. The history of Wales shows us how, within that mountainous district itself, subordination to one ruler was difficult to establish; and still more how difficult it was to bring the whole under the

central power from the primitive Old-English period down to 1400, eight centuries of resistance passed before the subjugation was complete, and a further interval before the final incorporation with England. The region of the Fens, in the earliest times a haunt of marauders and those who escaped from established power, became, at the time of the Conquest, the last refuge of the still-resisting English, who, for many years, maintained their freedom in this tract, made almost inaccessible by morasses. The long-continued independence, of the Highland clans, who were brought under central government only after General Wade's roads put their wild refuge within reach, yields a later proof.

Conversely, social integration is facilitated within a territory which, while it is able to support a large population, affords facilities for coercing the units of that population: especially if at the same time it is bounded by regions offering little sustenance, or peopled by enemies, or both. Egypt fulfilled these conditions to social integration in a high degree. Governmental force was unimpeded by physical obstacles within the occupied area; and escape from it into the adjacent desert, involved either starvation or robbery and enslavement by the wandering hordes. Joining together these examples of hinderance to social integration by some forms of surface and facilitation by others, we may figuratively say that it is a process of welding, which can be effectually carried on only when there is both pressure and difficulty in evading that pressure.

And here, indeed, we are reminded how, in extreme cases, the nature of the surface permanently determines the type of social life it bears. From the earliest recorded times, these arid tracts in the East have been peopled by Semitic tribes having a rudimentary social type fitted to them. In like manner the description in Herodotus of the Scythian's mode of life and social organization, is substantially the same as that given of the Kalmucks by Pallas. Even were regions fitted for nomads to have their inhabitants exterminated, they would be

re-peopled by refugees from neighbouring settled societies; who would similarly be compelled to wander by the characters of their habitat, and would similarly acquire an adapted form of union, with its fit ideas, sentiments, usages. There is, indeed, a modern instance in point: not exactly of a re-genesis of an adapted type of society, but of a genesis *de novo*. Since the colonization of South America, some of the pampas have become the refuges of robber-tribes like Bedouins.

Another trait of the inhabited surface next to be noted as influential, is its degree of heterogeneity. Other things equal, localities that are comparatively uniform are unfavourable to social progress. Leaving out for the present its effects on the Flora and Fauna, sameness of surface implies absence of varied inorganic materials, absence of varied experiences, absence of varied habits, and, therefore, puts obstacles to the development of commerce and the arts of life. Neither Central Asia, nor Central Africa, nor the central region of either American continent, has been the seat of an indigenous civilization of any height. Regions like the Russian steppes, however possible it may be to carry into them civilizations elsewhere developed, are regions within which civilization is not likely to be initiated; because the differentiating influences are insufficient. Uniformity of habitat, even when caused in quite another way, has elsewhere the like effect. As Professor Dana asks respecting a coral-island.—

“How many of the various arts of civilized life could exist in a land where shells are the only cutting instruments—fresh water barely enough for household purposes—no streams, nor mountains, nor hills? How much of the poetry and literature of Europe would be intelligible to persons whose ideas had expanded only to the limits of a coral-island, who had never conceived of a surface of land above half a mile in breadth—of a slope higher than a beach, or of change in seasons beyond a variation in the prevalence of rain?”

Contrariwise, the effect produced by geological and geographical heterogeneity in furthering social development,

is conspicuous. Though, considered absolutely, the Nile-valley is not multiform in character to a great degree, yet, in comparison with surrounding tracts it is so ; and it presents that which seems the most constant antecedent to civilization—the juxtaposition of land and water. Though the Babylonians and Assyrians had habitats that were not specially varied, yet they were varied in comparison with the riverless regions lying East and West. The strip of territory in which the Phœnician society arose, united the characters of, a relatively-extensive coast-line, many rivers falling into it, furnishing at their mouths sites for the chief cities ; plains and valleys running inland, with hills between them and mountains beyond them. Still more conspicuously does heterogeneity distinguish the area in which development of the Greek society took place. It is varied in its multitudinous and complex distributions of land and sea, in its contour of surface, in its soil. As is remarked by Mr. Tozer in his recent *Lectures on the Geography of Greece*, “No part of Europe—perhaps it would not be too much to say no part of the world—presents so great a variety of natural features within the same area as Greece.” The Greeks themselves, indeed, observed the effects of local circumstances within their own territory, in so far as the unlikeness between coast and interior goes. As says Mr. Grote —

“The ancient philosophers and legislators were deeply impressed with the contrast between an inland and a maritime city. In the former simplicity and uniformity of life, tenacity of ancient habits and dislike of what is new or foreign, great force of exclusive sympathy and narrow range both of objects and ideas, in the latter, variety and novelty of sensations, expansive imaginations, toleration and occasional preference for extraneous customs, greater activity of the individual and corresponding mutability of the state.”—*History of Greece*, vol. II., p. 296

Though it is obvious that the effects here described are, in large measure, those due to foreign intercourse ; yet, since this itself is dependent on the local relations of land and sea, these relations must be recognized as the primary causes of the difference. Just observing that in Italy, likewise, civi-

lization found a seat of considerable complexity, geological and geographical, we may pass to the New World, where we see the same thing. Central America, which was the source of its indigenous civilizations, is characterized by comparative multiformity, including, especially, its double coast-line. So, too, with Mexico and with Peru. The Mexican table-land, surrounded by mountains, contained many fine lakes: that of Tezcuco, with its islands and shores, being the seat of government; and besides the varied surface of Peru, we see that the Ynca-power spread from the mountainous islands of the large, irregular, elevated lake, Titicaca.

How soil, considered simply as fertile or barren, affects progress, remains to be observed. The belief that abundance of food obtained with little trouble, is unfavourable to social evolution, while not without an element of truth, is by no means true as currently accepted. The various semi-civilized peoples of the Pacific—the Sandwich Islanders, Tahitians, Tongans, Samoans, Fijians—show us considerable advances made in places where great productiveness renders life relatively easy. In Sumatra, where the luxuriance is such that rice yields 80 to 140 fold, and in Madagascar, where it yields 50 to 100 fold, and where other returns for labour are similarly large, social development has not been insignificant. On the adjacent continent it is the same. Kaffirs, inhabiting a tract having rich and extensive pasturage, contrast favourably, both individually and socially, with neighbouring races occupying regions that are relatively unproductive; and those parts of Central Africa in which the indigenous races have made most social progress, as Ashantee and Dahomey, have extremely-luxuriant vegetations. Indeed, if we call to mind the Nile-valley, and the exceptionally-fertilizing process it is naturally subject to, we see that the most ancient social development known to us, began in a region which, fulfilling other requirements, was also characterized by great productiveness.

And here, with respect to fertility, we may recognize a

truth allied to that which we recognized in respect to climate; namely, that the earlier stages of social growth and development are possible only where the resistances to be overcome are relatively small. As those arts of life by which loss of heat is prevented or counterbalanced, must be considerably developed before the relatively-inclement regions can be well peopled; so, the agricultural arts must be considerably developed before the less fertile tracts can support populations large enough to favour social evolution. And since arts of every kind are advanced only as societies progress in size and structure, it follows that there must be societies having habitats where abundant food can be procured by inferior arts, before there can be developed the arts required for dealing with less productive habitats. While yet feeble and little-evolved, societies can survive only where the circumstances are least trying. The ability to survive where circumstances are more trying, can be possessed only by the stronger and more evolved societies descending from these; and inheriting their acquired organization, appliances, and knowledge.

It should be added that variety in the character of the soil is a factor of importance, since this is influential in determining that multiplicity of vegetal products which largely aids social progress. In Damara-land, where the uniformity of surface is such that four kinds of mimosas exclude nearly every other kind of tree or bush, it is clear that, apart from further obstacles to progress, paucity of materials must be a great one. But here we verge upon another order of factors.

§ 18. How the character of its Flora affects the fitness of a habitat for supporting a society, scarcely needs showing. It is needful, however, to point out that while a defective Flora is a negative hinderance to social progress, a luxuriant Flora does not necessarily aid, but may impede. We will glance at both sets of effects.

Some of the Esquimaux have no wood at all; while others have only that which comes to them as ocean-drift. In this extreme case, by using snow or ice to build their houses, and by the shifts they are put to in making cups of seal-skin, fishing-lines and nets of whalebone, and even bows of bone or horn, these people show us how greatly advance in the arts of life is hindered by absence of fit vegetal products. With this Arctic race, too, as also with the nearly Antarctic Fuegians, we see that the absence or extreme scarcity of food-bearing plants, is an insurmountable impediment to social progress: implying, as it does, restriction to animal-food, necessarily more limited in quantity. Evidence better than that furnished by these regions where extreme cold is a coexisting hinderance, is furnished by Australia; where, in a climate that is on the whole favourable, the paucity of food-bearing plants and of plants otherwise useful, has been a part-cause of continued arrest at the lowest stage of barbarism. Large tracts of it, supporting but one inhabitant to sixty square miles, do not admit anything approaching to that density of population which is a needful condition to civilization.

Conversely, after observing how increase of population, making possible advance of social evolution, is furthered by abundance of vegetal products, as above shown in speaking of fertility of soil, we may observe how variety of vegetal products conduces to the same effect. Not only in the cases of the slightly-developed societies existing in regions covered by plants of numerous species, do we see that dependence on many kinds of roots, fruits, cereals, etc., is a safeguard against the famines apt to arise from failure of any single crop; but we see that the many useful materials furnished by a heterogeneous Flora, make possible a multiplication of appliances, a consequent advance of the arts, and an accompanying development of skill and intelligence. The Tahitians have on their island, fit woods for the frameworks and roofs of houses, with palm-leaves for thatch;

there are plants yielding them fibres out of which to twist cords, fishing-lines, matting, etc.; the tapa-bark, duly prepared, furnishes a cloth for their various articles of dress; they have cocoa-nuts for cups, etc., materials for baskets, sieves, and various domestic implements; they have plants giving them scents for their unguents, flowers for their wreaths and necklaces; they have dyes for stamping patterns on their dresses—all besides the various foods, bread-fruit, taro, yams, sweet-potatoes, arrow-root, fern-root, cocoa-nuts, plantains, bananas, jambo, ti-root, sugar-cane, etc. enabling them to produce numerous made dishes. And the utilization of all these materials obviously supplies a culture and discipline acting in various ways towards social advance. How influential the heterogeneity of a Flora is in this way, we may infer on observing that kindred results from it have arisen among an adjacent people, widely unlike in character and political organization. Those ferocious cannibals the Fijians, governed by feelings that are in many respects anti-social, have reached a development of the arts comparable with that of the Tahitians, with a division of labour and a commercial organization that are even superior, in a habitat similarly characterized by variety of vegetal products. Among the thousand species of indigenous plants in the Fiji Islands, there are such as yield the inhabitants materials for all purposes, from the building of war-canoes capable of carrying 300 men down to the making of dyes and perfumes. It may, indeed, be urged that the New Zealanders, exhibiting a social development similar in degree to that reached in Tahiti and Fiji, had a habitat of which the indigenous Flora was not varied. But the reply is that both by their language and their mythology, the New Zealanders are shown to have separated from other Malayo-Polynesians, after the arts of life had been considerably advanced; and that they brought these arts (as well as some cultivated plants) to a region which, though poor in edible plants, supplied in abundance plants otherwise useful.

As above hinted, mere luxuriance of vegetation is in some cases a hinderance to progress—vegetation, that is, which does not furnish available materials. Even that inclement region inhabited by the Fuegians, is, strange to say, made worse by the dense growth of useless underwood which clothes the rocky hills. And living though they do under conditions otherwise so different, the Andamanese are similarly restricted to the borders of the sea, by the impenetrable thicket which covers the land. Indeed various equatorial regions, rendered almost useless even to the partially civilized by jungle and tangled forest, were utterly worthless to the aborigines, who had no tools for clearing the ground. The primitive man, possessed of rude stone implements only, could find but few parts of the Earth's surface which, neither too barren nor bearing a growth too luxuriant, were available: so again reminding us that rudimentary societies are at the mercy of envionring conditions.

§ 19. There remains to be treated the Fauna of the region inhabited. Evidently this has a powerful effect, both on the degree of social growth and on the type of that growth.

The presence or absence of wild animals fit for food, influential as it is in determining the kind of individual life, is therefore influential in determining the kind of social organization. Where, as in North America, there existed a sufficiency of game to support the aboriginal races, hunting tended to continue the dominant activity, and a more or less nomadic habit being entailed by the migrations after game, there was a persistent impediment to agriculture, to increase of population, and to industrial development. We have but to consider the antithetical case of the various Polynesian races, and to observe how, in the absence of any considerable land-Fauna, they have been forced into agriculture with its concomitant settled life, larger population, and advanced arts, to see how great an effect the kind and

amount of utilizable animal-life in a locality has on civilization.

When we glance at that pastoral type of society which, still existing, has played in past times an important part in human progress, we again see that over wide regions the indigenous Fauna has been chiefly influential in fixing the form of social union. On the one hand, in the absence of horses, camels, oxen, sheep, goats—mammals admitting of domestication—the kind of life followed by the three great conquering races in their original habitats, would have been impossible; and, on the other hand, this kind of life, bringing with it the adapted social relations, prevented, so long as it continued, that formation of larger settled unions which is needed for the higher social relations. On recalling the cases of the Laplanders with their reindeer and dogs, the Tartars with their horses and cattle, and the South Americans with their llamas and guinea-pigs, it becomes obvious, too, that in various cases this nature of the Fauna, joined with that of the surface, still continues to be a cause of arrest at a certain stage of evolution.

While the Fauna is thus an important factor as containing an abundance or scarcity of members useful to man, it is also an important factor as containing an abundance or scarcity of injurious members. The presence of the larger carnivores is, in some places, a considerable impediment to the carrying on of social life: as in Sumatra, where villages are not uncommonly depopulated by tigers, as in India, where "a single tigress caused the destruction of 13 villages, and 256 square miles of country were thrown out of cultivation," and where "in 1869 one tigress killed 127 people, and stopped a public road for many weeks." Indeed we need but recall the evils once experienced in England from wolves, and those still experienced in northern parts of Europe, to see that perfect freedom to carry on out-door occupations, and perfect freedom of intercourse, which are among the conditions to social advance, may be hindered by-

predatory animals. Nor must we forget how greatly that subjugation of surface implied by development of agriculture, is occasionally interfered with by reptiles. instance, again, the case of India, where, according to Dr Fayrer's recent work, 20,000 persons die of snake-bite annually—a number given in recent official returns as 25,664. To which evils directly inflicted by the higher animals, have to be added the indirect evils which they join insects in inflicting, by destroying crops. Sometimes injuries of this last kind appear considerably to affect the mode of individual, and consequently of social, life; as in Kaffirland, where crops are subject to great depredations from mammals, birds, and insects, and where the transformation of the pastoral state into a higher state is thus discouraged; or as in the Bechuana-country, which, while "peopled with countless herds of game, is sometimes devastated by swarms of locusts." Clearly, where the industrial tendencies are still feeble, uncertainty in getting a return for labour must hinder the development of them, and prompt reversion to older modes of life if these can still be pursued.

Many other mischiefs, caused especially by insects, seriously interfere with social progress. Even familiar experiences in Scotland, where the midges sometimes drive one indoors, suffice to show how greatly "the plague of flies" must, in tropical regions, discourage continuous outdoor activity by men already averse to labour. Where, as on the Orinoco, the morning salutation is—"How have the mosquitos used you?" and where the torment is such that a priest could not believe Humboldt voluntarily submitted to it merely that he might see the country, the desire for relief must often outbalance the already-feeble motive to work. Even the effects of flies on cattle, indirectly modify social life: as among the Kirghiz, who, in May, when the steppes are covered with rich pasture, are obliged by the swarms of flies to take their herds to the mountains; or as in Africa, where the *tsetse* negatives the

pastoral occupation in some localities. And then, in other cases, great discouragement is experienced from the *termites*, which, in parts of East Africa, consume dress, furniture, beds, etc. "A man may be rich to-day and poor to-morrow, from the ravages of the white ants," said a Portuguese merchant to Livingstone. Nor are these the only evils they inflict. As Humboldt remarks, "where the *termites* destroy all documents, there can be no advanced civilization."

Thus there is a close relation between the type of social life indigenous in a locality, and the character of the indigenous Fauna. The presence or absence of useful species, and the presence or absence of injurious species, have their favouring and hindering effects. In every case these effects vary according to the specialities and proportions of these causes; and there is not only so produced a furtherance or retardation of social progress, generally considered, but there is produced more or less speciality of nature in the structures and functions of the community.

§ 20. To enumerate and describe fully these original external factors, in their multitudinous degrees and combinations, is out of the question. An approximately-complete account of the classes briefly characterized above, would be a work of years; and there would have to be added many special influences of environing conditions not yet indicated.

Effects of differences in degree and distribution of light, as illustrated by the in-door life and culture which the Arctic night causes among the Icelanders, would have to be treated; as also the minor effects due to greater or less brilliancy of ordinary daylight in sunny and cloudy climates on the mental states, and therefore on the actions, of the inhabitants. The familiar fact that habitual fineness of weather and habitual inclemency, lead respectively to outdoor social intercourse and in-door family-life, and so influence the characters of citizens, would have to be taken

into account. So, too, would the modifications of popular ideas and feelings wrought by imposing meteorologic and geologic phenomena. And beyond the effects, made much of by Mr. Buckle, which these grand and unexpected displays of natural energies produce on men's imaginations, and consequently on their behaviour, there would have to be noted their effects of other orders: as, for instance, those which frequent earthquakes in a locality have on the type of architecture—causing a preference for houses that are low and slight; and so modifying both the domestic arrangements and the æsthetic culture. Again, the character of the fuel which a locality yields has consequences that ramify in various directions; as we see in the contrast between our own coal-burning London, with its blackened rows of houses made gloomy and depressing by absorption of light, and the wood-burning cities of the continent, where general lightness and the use of bright colouring induce a different state of feeling having different results. How the mineralogy of the region affects the degree of civilization and the industrial arrangements, scarcely needs pointing out. Entire absence of metals may negative local advance out of the stone-age; presence of copper may lead to an advance; presence or proximity of tin, rendering bronze possible, may cause a further step; and if there are iron-ores, a still further step may presently be taken. So, too, the supply or want of lime for mortar, affects the sizes and types of buildings, private and public; and thus influences domestic and social habits, as well as æsthetic culture. Even down to such a minor peculiarity as the presence of hot springs, which in ancient Central America initiated a local manufacture of pottery, there would have to be traced the influence of each particular combination of conditions in determining the prevailing industry, and therefore, in part, the type of social organization.

But a detailed account of the original external factors, whether of the more important kinds outlined in preceding

pages or of the less important kinds just exemplified, pertains to what we may here distinguish as Special Sociology. Any one who, carrying with him the general principles of the science, undertook to interpret the evolution of each society, would have to give an exhaustive account of these many local causes in their various kinds and degrees. Such an undertaking must be left for the sociologists of the future.

§ 21. Here my purpose has been simply to give general ideas of the original external factors, in their different classes and orders; so as to impress on the reader the truth, barely enunciated in the preceding chapter, that the characters of the environment co-operate with the characters of human beings in determining social phenomena.

One of the results of enumerating these original external factors and observing the important parts they play, has been that of bringing into view the fact, liable to be overlooked, that the earlier stages of social evolution are far more dependent on local conditions than the later stages. Though societies such as we are now most familiar with, highly organized, rich in appliances, advanced in knowledge, can, by the help of various artifices, thrive in unfavourable habitats; yet feeble, unorganized societies cannot do so: they are at the mercy of their natural surroundings. And, seeing that this is so with the inferior social types now existing, we may infer that it was even more so with the still-less-developed types which preceded them.

It should be observed, too, that we thus find answers to the questions sometimes raised as obstacles to the general doctrine of social evolution—How does it happen that so many tribes of savages have made no manifest progress during the long period over which human records extend? And if it is true that the human race existed during the later geologic periods, why, for 100,000 years or more, did no traceable civilization result? To these questions, I say,

adequate replies are furnished. When we glance over the classes and orders of original external factors above set down, and observe how rare is that combination of favourable ones and absence of unfavourable ones, by which alone the germs of societies can be fostered; when we remember that in proportion as the appliances are few and rude, the knowledge small, and the power of co-operation undeveloped, the establishment of any improvement in face of surrounding difficulties must take a long period; when we remember that this same helplessness of primitive social groups left them exposed to each adverse change, and so caused repeated losses of the small advances made; it becomes easy to understand why, for an enormous period, no considerable societies were evolved.

But now having made a general survey of these original external factors; having recognized the all-important part they play in social evolution, especially during its first stages; and having noted the explanation thus yielded of the tardy appearance of civilization and of its non-appearance over a large part of the world; we may here leave all detailed consideration of them as not further concerning us. For in dealing, as we have now to do, with the Principles of Sociology, we have to deal with facts of structure and function displayed by societies in general, dissociated, so far as may be, from special facts due to special circumstances. Henceforth we shall occupy ourselves with those characters of societies which depend mainly on the intrinsic natures of their units, rather than with the characters determined by particular extrinsic influences: these will be recognized but occasionally or but tacitly.

CHAPTER IV.

ORIGINAL INTERNAL FACTORS.

§ 22. As with the original external factors, so with the original internal factors—an adequate account of them supposes a far greater knowledge of the past than we can get. On the one hand, from men's bones, and objects betraying men's actions, discovered in geological formations and in cave-deposits, dating back to periods since which there have been great changes of climate and re-distributions of land and sea, we must infer that the habitats of mankind have been ever undergoing modifications; though what modifications we can but vaguely guess. On the other hand, unceasing alterations of habitats imply that the races subject to them have been undergoing changes of function and structure, respecting most of which we can know little more than their occurrence.

Such fragmentary evidence as we have at present, does not warrant definite conclusions respecting the ways and degrees in which men of the remote past differed from men now existing. There are, indeed, remains which, taken by themselves, indicate inferiority of type in ancestral races. The Neanderthal-skull, and others like it, with their enormous supra-orbital ridges, so simian in character, are among these. There is also the skull lately found by Mr. Gillman, in a mound on the Detroit river, Michigan, and described by him as chimpanzee-like in the largeness of the areas over

which the temporal muscles were inserted. But as this remarkable skull was found along with others that were not remarkable, and as such skulls as that from the cave in the Neanderthal are not proved to be of more ancient date than skulls which deviate little from common forms, no decisive inferences can be drawn.

Similarly with other parts of skeletons. A bone from the cave at Settle, left there, Mr. Geikie thinks, before the last inter-glacial period, and identified by Professor Busk as human, is described by him as part of "an unusually clumsy fibula;" and he observes that it is similar in character to one found in a cave at Mentone. At the same time, however, he points out that there is in the museum of the College of Surgeons, a recent fibula similarly clumsy. All we seem warranted in saying is that what was in those days a not infrequent, and probably a general, trait, is now a rare one.

A kindred, but perhaps a somewhat more positive, statement, may be made respecting the extreme compression of the tibiae in certain ancient races, which is expressed by the epithet "platycnemic." First pointed out by Professor Busk and Dr. Falconer, as characterizing the men who left their bones in the caves of Gibraltar, this peculiarity, shortly afterwards discovered by M. Broca in the remains of cave-men in France, was observed afresh by Mr. Busk in remains from caves in Denbighshire; and more recently Mr. Gillman has shown that it characterizes tibiae found along with the rudest stone-implements in mounds on the St. Clair river, Michigan. As this trait is not known to distinguish any races now living, while it existed in races which lived in localities so far apart as Gibraltar, France, Wales, and North America, we may fairly infer that an ancient race, distributed over a wide area, was in so far unlike races which have survived.

Two general conclusions only seem warranted by the facts at present known. The first is that in remote epochs, as now, there were varieties of men distinguished

by differences of osseous structure considerable in degree, and probably by other differences; and the second is, that some traits of brutality and inferiority exhibited in certain of these ancient varieties, have either disappeared or occur only as unusual variations.

§ 23. Thus respecting the original internal factors, taken in that comprehensive sense which includes the traits of pre-historic man, we can ascertain very little. But recognizing this truth, we may fairly draw from the researches of geologists and archæologists, the inference that throughout long-past periods, as since the commencement of history, there has been going on a continuous differentiation of races, a continuous over-running of the less powerful or less adapted by the more powerful or more adapted, a driving of inferior varieties into undesirable habitats, and, occasionally, an extermination of inferior varieties.

And now, carrying with us this general conception of primitive man, we must be content to fill it out, so far as we may, by studying those existing races of men which, as judged by their physical characters and their implements, approach most nearly to primitive man. Instead of including in one chapter all the classes and sub-classes of traits to be set down, it will be most convenient to group them into three chapters. We will take first the physical, then the emotional, lastly the intellectual.

CHAPTER V.

THE PRIMITIVE MAN—PHYSICAL.

§ 24. IN face of the fact that the uncivilized races include the Patagonians, ranging from six to seven feet in height, while in Africa there still exist remnants of the barbarous people referred to by Herodotus as pygmies, we cannot say that there is any direct relation between social state and stature. Among the North-American Indians there are hunting races decidedly tall; while, elsewhere, there are stunted hunting races, as the Bushmen. Of pastoral peoples, too, some are short, like the Kirghiz, and some are well-grown, like the Kaffirs. And there are kindred differences between races of agricultural habits.

Still, the evidence taken in the mass implies an average relation between barbarism and inferiority of size. In North America the Chinooks and sundry neighbouring tribes are described as low in stature; and the Shoshones are said to be of "very diminutive stature." Of the South-American races it is asserted that the Guiana Indian is mostly much below 5 ft. 5 in.; that the Arawaks average 5 ft. 4 in.; and that the Guaranis rarely reach 5 ft. So, too, is it with the uncivilized peoples of Northern Asia. Pallas classes the Ostyaks as short, the Kirghiz are said to average 5 ft. 3 or 4 in.; and we read that the Kamtschadales "are in general of low stature." In Southern Asia it is the same. One authority describes, generally, the Tamulian

aborigines of India as smaller than the Hindus. Another, writing of the Hill-tribes, says of the Puttooahs that "the men do not exceed 5 ft. 2 in., and the women 4 ft. 4 in." Another estimates the Lepchas as averaging about 5 ft. And the Juáangs, perhaps the most degraded of these tribes, are set down as, males less than 5 ft., and women 4 ft. 8 in. But this relationship is most clearly implied on grouping together the very lowest races. Of the Fuegians we read that some tribes are "not more than 5 ft. high", of the Andamanese, that the men vary from 4 ft. 10 in. to nearly 5 ft., of the Veddahs, that the range is from 4 ft. 1 in. to 5 ft. 3 in.—the common height being about 4 ft. 9 in. Again, the ordinary height of the Bushmen is given as 4 ft. 4½ in., or, according to Barrow, 4 ft 6 in. for the average man, and 4 ft. for the average woman. While their allies, the Akka, lately discovered in the heart of Africa by Schweinfurth, are said by him to vary from 4 ft. 1 in to 4 ft. 10 in.: the women, whom he did not see, being presumably still smaller.

How far is this an original trait of inferior races, and how far is it a trait superinduced by the unfavourable habitats into which superior races have driven them? Evidently the dwarfishness of Esquimaux and Laplanders may be due partly, if not wholly, to the great physiological cost of living entailed by the rigorous climate they have to bear; and it no more shows the dwarfishness of primitive men than does the small size of Shetland ponies show that primitive horses were small. Similarly in the case of the Bushmen, who are wanderers in a territory "of so barren and arid a character, that by far the greater portion of it is not permanently habitable by any class of human beings," it is supposable that chronic innutrition has produced a lower standard of growth. Manifestly, as the weaker were always thrust by the stronger into the worst localities, there must ever have been a tendency to make greater any original difference of stature and strength.

Hence the smallness of these most degraded men, may have been original; or it may have been acquired; or it may have been partly original and partly acquired. In one case, however, I learn on good authority that the low stature was probably original. Facts do not justify the belief that the Bushmen, the Akka, and kindred races found in Africa, are dwarfed varieties of the Negro race, but suggest the belief that they are fragments of a race which the Negroes dispossessed. And this conclusion, warranted by the physical differences, is countenanced by general probability and by analogy. Without making much of the rumoured dwarf-race in the central parts of Madagascar, or of that in the interior of Borneo, it suffices to recall the Hill-tribes of India, which are remnants of the indigenes islanded by the flood of Aryans, or the tribes further east, similarly islanded by the invading Mongols, or to the Mantras of the Malay-peninsula, to see that this process, exemplified too in pre-historic Britain by the extinction of the small men who left their bones in the Denbighshire caves, has probably occurred in Africa, and that these tribes of diminutive people are remnants of a people originally small, and not dwarfed by conditions.

Still, other evidence may be cited to show that we are not justified in conceiving primitive man as very decidedly inferior in size to man of developed type. The Australians, who, both individually and socially, are very low, reach a moderate stature; as did also the now-extinct Tasmanians. Nor do the bones of races which have disappeared, yield manifest proof that pre-historic man was, on the average, much less than historic man. Nevertheless, while recognizing the fact that among races not wholly uncivilized, as the Fijians, Kaffirs, some of the Negro-tribes, etc., there are very fine men, I have the opinion of a distinguished naturalist and anthropologist to the effect that the lowest races in general, do not equal in size the civilized races of Northern Europe.

We shall probably be safe in concluding that throughout the past, as at present, and that with the human race as other races, size is but one trait of higher evolution, which may or may not coexist with other traits; and that, within certain limits, it is determined by local conditions, which here favour the preservation of the largest, and elsewhere, when nothing is gained by size, conduce to the spread of a smaller variety relatively more prolific. But we may further conclude that since, in the struggle for existence between races, superiority of size gives advantages, there has been a tendency to increase, which has told where other conditions have allowed; and that the average primitive man was somewhat less than is the average civilized man.

§ 25. As of stature, so of structure, we must say that the contrast is not very marked. Passing over smaller distinctive traits shown us by some of the lowest human races, such as the deviation in the form of the pelvis, and the existence of solid bone where in the civilized the frontal sinus exists, we may limit ourselves to traits which have here a meaning for us.

Men of inferior types appear to be generally characterized by relatively-defective development of the lower limbs. Sufficiently marked as this is to have attracted the attention of travellers among various unrelated races, we shall probably not be wrong in setting it down as a primitive character. Pallas describes the Ostyaks as having "thin and slender legs." I find two authorities mentioning the "short legs" and "slender legs" of the Kamtschadales. So, among the Hill-tribes of India, Stewart says the Kookies have legs "short in comparison to the length of their bodies, and their arms long." Of sundry American races the like fact is remarked. We read of the Chinooks that they have "small and crooked" legs; of the Guaranis, that their "arms and legs are relatively short and thick;" and even of the gigantic Patagonians it is asserted that

"their limbs are neither so muscular nor so large-boned as their height and apparent bulk would induce one to suppose." This truth holds in Australia, too. Even if the leg-bones of Australians are equal in size to those of Europeans, it is unquestionable that their legs are inferior in mass of muscle. the lower part of the figure is of feebler make than the upper. Though I find no direct statement respecting the Fuegians under this head, yet since, while said to be short, they are said to have bodies comparable in bulk to those of higher races, it is inferable that their deficiency of height results from the shortness of their legs. Lastly, the description which Schweinfurth gives of the Akka, shows that not only have they "short, bandy legs," but that, though they are extremely agile (their small size giving them advantages in relative activity), their powers of locomotion are defective. "every step they take is accompanied by a lurch;" and Schweinfurth describes the one who was with him for many months, as never able to carry a full dish without spilling. Those remains of extinct races lately referred to, seem also to countenance the belief that the primitive man was characterized by lower limbs inferior to our own: the "unusually clumsy fibula" found in the Settle cave, and the one found at Mentone, as well as the platycnemic tibia once so widely prevalent, seem to imply this. While recognizing differences, we may fairly say that this trait of relatively-inferior legs is sufficiently marked; and it is a trait which, remotely simian, is also repeated by the child of the civilized man.

That the balance of power between legs and arms, which was originally better adapted to climbing habits, is likely to have been changed in the course of progress, is manifest. During the struggles between races, ever invading one another's localities, an advantage must have been gained by those having the legs somewhat more developed at the expense of the body at large. I do not mean chiefly an advantage in swiftness or agility; I mean in trials of

strength at close quarters. In combat, the power exercised by arms and trunk is limited by the power of the legs to withstand the strain thrown on them. Hence, apart from advantages in locomotion, the stronger-legged races have tended to become, other things equal, dominant races.

Among other structural traits of the primitive man which we have to note, the most marked is the larger size of the jaws and teeth. This is shown not simply in that prognathous form characterizing various inferior races, and, to an extreme degree, the Akka, but it is shown also in the races otherwise characterized: even ancient British skulls have relatively-massive jaws. That this trait is connected with the eating of coarse food, hard, tough, and often uncooked, and perhaps also with the greater use of the teeth in place of tools, as we see our own boys use them, is fairly inferable. Diminution of function has brought diminution of size, both of the jaws and of the attached muscles. Whence, too, as a remoter sequence, that diminution of the zygomatic arches through which these muscles pass: producing an additional difference of outline in the civilized face.

These changes are noteworthy as illustrating, unmistakably, the reaction which social development, with all the appliances it brings, has on the structure of the social unit. And recognizing the externally-visible changes arising from this cause, we can the less doubt the occurrence of important internal changes, as of brain, arising from the same cause.

§ 26. One further structural trait may be dealt with in immediate connexion with physiological traits. I refer to the size of the digestive organs.

Here we have to deal with very inadequate evidence. In the absence of some conspicuous modification of figure caused by large stomach and intestines, this character is one not likely to have been noticed by travellers: a considerable difference of internal capacity may have existed without attracting attention as a peculiarity. Still, we

have some evidence in point. Grieve describes the Kamtschadales as having "a hanging belly, slender legs and arms." Of the Bushmen, Barrow says, "their bellies are uncommonly protuberant." Schweinfurth speaks of the "large, bloated belly and short, bandy legs" of the Akka; and elsewhere, describing the structure of this degraded type of man, he says—"The superior region of the chest is flat, and much contracted, but it widens out below to support the huge hanging belly." Indirect evidence is supplied by the form of the young, alike of civilized and savage peoples. Doubtless, the relatively-large abdomen in the child of the civilized man, is in the main an embryonic trait. But as the children of inferior races are *more* distinguished in this way than our own children, we get indirect reason for thinking that the less-developed man was thus distinguished from the more-developed. Schweinfurth refers to the children of the African Arabs as like the Akka in this respect. Describing the Veddahs, Tennant mentions the protuberant stomachs of the children. Galton, after saying of the Damara children that "all have dreadfully swelled stomachs," expresses his surprise that they should become so well shaped at maturity. And from Dr. Hooker I learn that the like trait holds throughout Bengal.

The possession of a relatively-larger alimentary system is, indeed, a character of the lowest races inferable from their immense capacities for containing and digesting food. These capacities are made familiar to us by travellers. Wrangel says each of the Yakuts ate in a day six times as many fish as he could eat. Cochrane describes a five-year-old child of this race as devouring three candles, several pounds of sour frozen butter, and a large piece of yellow soap; and adds—"I have repeatedly seen a Yakut, or a Tongousi, devour forty pounds of meat in a day." Of the Comanches, Schoolcraft says—"After long abstinence they eat voraciously, and without apparent inconvenience."

Thompson remarks that the Bushmen have "powers of stomach similar to the beasts of prey, both in voracity and in supporting hunger." And no less clear is the implication of the stories of gluttony told by Captain Lyon about the Esquimaux, and by Sir G. Grey about the Australians.

Such traits appear to be necessary. It seems scarcely possible that a digestive apparatus large enough for a civilized man, feeding at short and regular intervals, should be large enough for a savage whose meals, sometimes scanty, sometimes abundant, follow in succession, now quickly, and now after the lapse of days. One who depends on the chances of the chase will profit by the ability to digest a great quantity when it is obtainable, to compensate for intervals of semi-starvation. A stomach able to deal only with a moderate meal, must leave its possessor at a disadvantage in comparison with one whose stomach is able, by immense meals, to make up for many meals missed.

Beyond the need hence arising for a large alimentary system, there is the need arising from the low quality of the food. Wild fruits, nuts, berries, roots, shoots, etc., must be eaten in great masses to yield the required supplies of nitrogenous compounds, fats, and carbo-hydrates; and of animal food, the insects, larvæ, worms, vermin, and offal, consumed in default of larger prey, contain much waste. Indeed, the massive jaws and worn teeth of savages, serve of themselves to show that much indigestible matter is masticated and swallowed. Hence, such an abdominal development as the Akka show in a degree which recalls a simian character, may be regarded as a trait of primitive man that is, in a greater or less degree, necessitated by primitive conditions.

Just noting that some mechanical disadvantage results from having to carry about relatively-larger stomach and intestines, let us observe, chiefly, the physiological effects naturally accompanying such a structure adapted to such circumstances. At times when enormous meals have to be

digested, repletion must be accompanied by inertness ; and at times when, from lack of food, the energies flag, there can be none to spare for any activities save those prompted by hunger. Clearly, persistent industry is favoured by an equable flow of energy, and this implies regular feeding. The irregular feeding entailed on the primitive man, prevents continuous labour · so hindering, in yet another way, the actions required to lead him out of his primitive state.

§ 27. There is evidence that, apart from stature and apart even from muscular development, the uncivilized man is less powerful than the civilized man. He is unable to exert suddenly as great an amount of force, and he is unable to continue the expenditure of force for so long a time. Here are a few testimonies to this effect.

Of the Tasmanians, now no longer existing, Perron said that, though they were vigorous-looking, the dynamometer proved them to be inferior in strength. So, too, of their allies by race, the Papuans : “although well made,” these are described as being “our inferiors in muscular power.” Respecting the aborigines of India, the evidence is not quite consistent. Mason asserts of other Hill-tribes, as of the Karens, that their strength soon flags ; while Stewart describes the Kookie boys as very enduring · the anomaly being, as we shall presently see, possibly due to the fact that he did not test their endurance over successive days. While describing the Damaras as having “immense muscular development,” Galton says—“I never found one who was anything like a match for the average of my own men” in trials of strength, and Anderson makes a like remark. Galton further observes that “in a long, steady journey the savages [Damaras] quickly knock up unless they adopt some of our usages.” Similarly with American races. King found the Esquimaux relatively weak ; and Burton remarks of the Dakotahs that, “like all savages, they are deficient in corporeal strength.”

There are probably two causes for this contrast between savage and civilized—relative innutrition, and relatively-smaller development of the nervous system. On remembering that a horse out at grass gains in bulk while losing his fitness for continued exertion, and that to prepare him for hunting he is put on a more nutritive diet under which he diminishes in size while he increases in power, we shall see that a savage may have bulky limbs and be comparatively weak, and that his weakness may be still more marked when his muscles, fed by a blood of low quality, are, at the same time, small. Men in training for feats of strength, show us that it takes months to raise muscles to their highest powers, whether of sudden exertion or prolonged exertion. Whence it is to be inferred that from food poor in kind and irregularly supplied, deficiency of strength, under both its forms, will result. The other cause, less obvious, is one which must not be overlooked. As was shown in the *Principles of Psychology*, Ch. I., it is the nervous system rather than the muscular system, which measures the force evolved. Throughout the animal kingdom the development of the nervous system, which is the initiator of all motion, varies partly as the quantity of motion generated and partly as the complexity of that motion. On remembering the failure of muscular power which comes along with flagging emotions or desires lapsing into indifference, and, contrariwise, the immense power given by intense passion, which, as in the insane, greatly exceeds that put out by a man under ordinary excitement, we shall see how immediate is the dependence of strength upon feeling. And, seeing this, we shall understand why, other things equal, the savage with a smaller brain, generating less feeling, is not so strong.

§ 28. Among the physiological traits which distinguish man in his primitive state from man in his advanced state, we may with certainty set down relative hardness. Con-

trast the trial of constitution which child-bearing brings on the civilized woman, with the small constitutional disturbance it causes to the savage woman. Ask what would happen to both mother and child, under the conditions of savage life, had they no greater toughness of *physique* than is possessed by the civilized mother and child. Both the existence of this trait and its necessity will then be obvious.

Inevitably, survival of the fittest must ever have tended to produce and maintain a constitution capable of enduring the miseries, hardships, injuries, necessarily accompanying a life at the mercy of surrounding actions; since there must ever have been a destruction of constitutions not enduring enough. The Fuegian who quietly lets the falling sleet melt on his naked body, must be the product of a discipline which has killed off all who were not extremely tenacious of life. When we read that the Yakuts, who from their ability to bear cold are called "iron men," sometimes sleep in that rigorous region "completely exposed to the heavens, with scarcely any clothing on, and their bodies covered with a thick coat of rime," we cannot but infer that their adaptation to the severities of their climate has resulted from the continual destruction of all but the most resisting. Similarly with respect to another detrimental influence. Mr. Hodgson remarks that a "capacity to breathe malaria as though it were common air characterizes nearly all the Tamulian aborigines of India"; and we need but recall the ability of Negro-races to live in pestilential regions, to see that elsewhere there has been similarly produced a constitutional power to withstand deleterious vapours. So, too, is it with the bearing of bodily injuries. The recuperative powers of the Australians, and others of the lowest races, are notorious. Wounds which would be quickly fatal to Europeans they readily recover from.

Whether this gain entails loss in other directions, we have no direct evidence. It is known that the hardier

breeds of domestic animals are smaller than the less hardy breeds; and it may be that a constitution adapted to extreme perturbations gains its adaptation at the expense, perhaps of size, perhaps of energy. It seems, indeed, highly probable that this physiological advantage is purchased by some physiological disadvantage—a disadvantage escaped by the higher races whose arts of life enable them to evade these deranging actions. And if so, this fitness for primitive conditions entails some further impediment to the establishment of higher conditions.

§ 29. A closely-related physiological trait must be added. Along with this greater ability to bear injurious actions, there is a comparative indifference to the disagreeable or painful sensations those actions cause; or rather, the sensations they cause are not so acute. There are many testimonies to this fact, of which a few will suffice. According to Lichtenstein, the Bushmen do not “appear to have any feeling of even the most striking changes in the temperature of the atmosphere.” Gardiner says the Zulus “are perfect salamanders”—arranging the burning faggots with their feet, and dipping their hands into the boiling contents of cooking-vessels. And it is said that the Abipones are “extremely tolerant of the inclemencies of the sky.” Similarly respecting the feelings caused by bodily injuries. Travellers in many lands express surprise at the seeming indifference to pain displayed by inferior races. The calmness with which they undergo serious operations, forces on us the belief that the sufferings produced must be much less than would be produced in men of higher types.

Here we have a further characteristic which might have been inferred *à priori*. Pain of every kind, down even to the irritation produced by discomfort, entails a physiological waste of a detrimental kind. No less certain than the fact that continued agony is followed by exhaustion, which in feeble persons may be fatal, is the fact that minor sufferings,

including the disagreeable sensations caused by cold and hunger, undermine the energies, and may, when the vital balance is difficult to maintain, destroy it. Among primitive races it must continually have happened that individuals with the keenest sensations, worn more than others in bearing hardships and the pains of wounds, succumbed when others did not. The most callous must have had the advantage when irremediable evils had to be borne; and thus relative callousness must have been made, by survival of the fittest, constitutional.

This physiological trait of primitive man has a meaning for us. Positive and negative discomforts—the sufferings which come from over-stimulated nerves, and the cravings which come from parts of the nervous system debarred from their normal actions—being in all cases the stimuli to exertion, it results that a constitution characterized by callousness, is a constitution less readily spurred into activity. A physical evil which will prompt a relatively-sensitive man to provide a remedy, will leave a relatively-insensitive man almost or quite inert: either he will submit passively, or he will be content with some inadequate, make-shift remedy.

So that beyond the sundry positive obstacles to advance, there exists at the outset this negative obstacle, that those simplest feelings which prompt efforts and cause improvements, are less intense.

§ 30. As preliminary to the summing up of these physical characters, I must name a most general one—early arrival at maturity. Other things equal, the less evolved types of organisms take shorter times to reach their complete forms than do the more evolved; and this contrast, conspicuous between men and most inferior creatures, is perceptible between varieties of men. There is reason for associating this difference with the difference in cerebral development. The greater costliness of the larger brain, which so long delays human maturity, as compared with mammalian ma-

turity generally, delays also the maturity of the civilized as compared with that of the savage. Causation apart, however, the fact is that (climate and other conditions being equal) the inferior races reach puberty sooner than the superior races. Everywhere the remark is made that the women early bloom and early fade, and a corresponding trait of course holds in the men. This completion of growth and structure in a shorter period is of interest to us as implying less plasticity of nature. the rigidity and unchangeableness of adult life sooner make modification difficult. We shall hereafter see that this trait has noteworthy consequences. For the present it is enough to observe that it tends to increase those obstacles to progress arising from the characters above described, which, on now re-enumerating them, we shall see are already great.

If the primitive man was on the average less than man as we now know him, there must have existed, during those earliest stages when there were only small groups of men capable of but the feeblest co-operation, with ineffective weapons, greater difficulties than afterwards in dealing with the larger animals, both enemies and prey. The inferiority of the lower limbs, alike in size and structure, must also have made primitive men less able to cope with powerful and swift creatures; whether they had to be escaped from or mastered. Besides the mechanical inconvenience attendant on his larger alimentary system, adapted to a very irregular supply of food, mostly inferior in quality, dirty, and uncooked, primitive man had a variable supply of nervous power, smaller in average amount than that which follows good feeding. Constitutional callousness, even of itself adverse to progress, must, when coexisting with this lack of persistent energy, have hindered still further any change for the better. So that in three ways the impediments due to physical constitution were at first greater than afterwards. By his structure man was not so well fitted for dealing with his difficulties; the energies required for

overcoming them were smaller and irregular in flow; and he was less sensitive to the evils he had to bear. At the time when his environment was entirely unsubjugated, he was least able and least anxious to subjugate it. While the resistances to progress were greatest, the power and the stimulus to overcome them were smallest.

CHAPTER VI.

THE PRIMITIVE MAN—EMOTIONAL.

§ 31. A MEASURE of evolution in living things, is the degree of correspondence between changes in the organism and coexistences and sequences in the environment. In the *Principles of Psychology* (§§ 139—176), it was shown that mental development is “an adjustment of inner to outer relations that gradually extends in Space and Time, that becomes increasingly special and complex, and that has its elements ever more precisely co-ordinated and more completely integrated.” Though in that place chiefly exemplified as the law of intellectual progress, this is equally the law of emotional progress. The emotions are compounded out of simple feelings, or rather, out of the ideas of them; the higher emotions are compounded out of the lower emotions; and thus there is progressing integration. For the same reason there is progressing complexity: each larger consolidated aggregate of ideal feelings contains more varied, as well as more numerous, clusters of components. Extension of the correspondence in Space, too, though less manifest, may still be asserted. witness the difference between the proprietary feeling in the savage, responding only to a few material objects adjacent to him—weapons, decorations, food, place of shelter, etc.—and the proprietary feeling in the civilized man, who owns land in Canada, shares in an Australian mine, Egyptian stock, and mortgage-bonds on an Indian railway. And that extension of the

correspondence in Time may be asserted of the more-evolved emotions, will be manifest on remembering how the sentiment of possession is gratified by acts of which the fruition can come only after many years, and even gets pleasure from an ideal power over bequeathed property; and on remembering how the sentiment of justice seeks satisfaction in reforms that are to benefit future generations.

As was pointed out in a later division of the *Principles of Psychology* (§§ 479—483), a more special measure of mental development is the degree of representativeness in the states of consciousness. Cognitions and feelings were both classified in the ascending order of presentative, presentative-representative, representative, and re-representative. This general order has been necessary; since there must have been presentation before representation, and representation before re-representation. It was shown, too, that this more special standard harmonizes with the more general standard; since increasing representativeness in the states of consciousness is shown by the more extensive integrations of ideas, by the greater definiteness with which they are represented, by the greater complexity of the integrated groups, as well as by the greater heterogeneity among their elements; and here it may be added that greater representativeness is also shown by the greater distances in space and time to which the representations extend.

There is a further measure which may be serviceably used along with the other two. In the *Principles of Psychology*, § 253, we saw that—

“Mental evolution, both intellectual and emotional, may be measured by the degree of remoteness from primitive reflex action. The formation of sudden, irreversible conclusions on the slenderest evidence, is less distant from reflex action than is the formation of deliberate and modifiable conclusions after much evidence has been collected. And similarly, the quick passage of simple emotions into the particular kinds of conduct they prompt, is less distant from reflex action than is the comparatively-hesitating passage of compound emotions into kinds of conduct determined by the joint instigation of their components.”

Here, then, are our guides in studying the primitive man as an emotional being. Considering him as less evolved, we must expect to find him comparatively wanting in those most complex emotions that respond to multitudinous and remote probabilities and contingencies. His consciousness differs from that of the civilized man, by consisting, to a much greater extent, of sensations and the simple represented feelings directly associated with them, and by containing fewer and weaker feelings involving representations of consequences beyond the proximate. And the relatively-simple emotional consciousness thus characterized, we may expect to be consequently characterized by less of that coherence and continuity which results when the promptings of direct desires are checked by sentiments responding to ultimate effects, and by more of that irregularity which results when each desire as it arises discharges itself in action before counter-desires have been awakened.

§ 32. On turning from these deductions to examine the facts with a view to induction, we meet difficulties like those met in the last chapter. As in size and structure, the inferior races differ from one another enough to produce some indefiniteness in our conception of the primitive man—physical; so in their passions and sentiments, the inferior races present contrasts which obscure the essential traits of the primitive man—emotional.

This last difficulty, like the first, is indeed one that might have been anticipated. The spreading of the race during all past epochs into multitudinous widely-contrasted habitats, entailing widely-unlike modes of life, has necessarily been accompanied by emotional specialization as well as by physical specialization. And beyond differentiations of character directly due to differences of natural circumstances and resulting habits, the inferior varieties of men have been made to differ by the degrees and durations of

social discipline they have been subject to. Referring to such unlikenesses, Mr. Wallace remarks that "there is, in fact, almost as much difference between the various races of savage as of civilized peoples."

To conceive the primitive man, therefore, as he existed when social aggregation commenced, we must generalize as well as we can this entangled and partially-conflicting evidence: led mainly by the traits common to the very lowest, and finding what guidance we may in the *a priori* conclusions set down above.

§ 33 The fundamental trait of impulsiveness, though one to be looked for as universal among inferior races, is not everywhere conspicuous. Taken in the mass, the aborigines of the New World seem impassive in comparison with those of the Old World some of them, indeed, exceeding the civilized peoples of Europe in ability to control their emotions. Through stories, most people have been made familiar with this trait of the North-American Indians; and the statements of recent travellers confirm those of older ones. The Dakotahs are said to suffer with patience both physical and moral pains. The Creeks display "phlegmatic coldness and indifference." With native peoples of South America it is the same. According to Burnand, the Guiana Indian, though "strong in his affections, will lose his dearest relations, as he bears excruciating pains, with apparent stoical insensibility;" and Humboldt speaks of his "resignation." So, too, of the Uaupes Wallace comments on "the apathy of the Indian, who scarcely ever exhibits any feelings of regret on parting or of pleasure on his return." And that a character of this kind was wide-spread, seems implied by accounts of the ancient Mexicans, Peruvians, and peoples of Central America, who were not impulsive. Nevertheless, there are among these races traits of a contrary kind, more congruous with those of the uncivilized races generally. Spite of their usually unimpas-

sioned behaviour, the Dakotahs rise into frightful states of bloody fury when killing buffaloes; and among the phlegmatic Creeks, there are "very frequent suicides caused by trifling disappointments." Some of the American indigenes, too, do not show this apathy as, in the North, the Snake-Indian, who is said to be "a mere child, irritated by, and pleased with, a trifle;" and as, in the South, the Tupis, of whom we read that "if a savage struck a foot against a stone, he raged over it, and bit it like a dog." Such non-impulsiveness as exists in the American races may possibly be due to constitutional inertness. Among ourselves, there are people whose habitual equanimity results from want of vitality. being but half alive, the emotions produced in them by irritations have less than the usual intensities. That apathy thus caused may account for this peculiarity, seems, in South America, implied by the alleged sexual coldness.

Recognizing what anomaly there may be in these facts, we find, throughout the rest of the world, a general congruity. Passing from North America to Asia, we come to the Kamtschadales, of whom we read that they are "excitable, not to say (for men) hysterical. A light matter set them mad, or made them commit suicide," and we come to the Kirghiz, who are said to be "fickle and uncertain." Turning to Southern Asiatics, we find Burton asserting of the Bedouin that his valour is "fitful and uncertain." And while, of the Arabs, Denham remarks that "their common conversational intercourse appears to be a continual strife and quarrel," Palgrave says they will "chaffer half a day about a penny, while they will throw away the worth of pounds on the first asker." In the African races we find a like character. Captain Burton, saying that the East-African is, "like all other barbarians, a strange mixture of good and evil," describes him thus —

"He is at once very good-tempered and hard-hearted, combative and cautious, kind at one moment, cruel, pitiless, and violent at

another, sociable and unaffectionate, superstitious and grossly irreverent, brave and cowardly, servile and oppressive, obstinate, yet fickle and fond of change, with points of honour, but without a trace of honesty in word or deed, a lover of life, though addicted to suicide, covetous and parsimonious, yet thoughtless and improvident”

With the exception of the Bechuanas, of whom even temper and self-command are asserted, the like is true of the races further south. Thus, in the Damara, Galton says the feeling of revenge is very transient—“gives way to admiration of the oppressor.” Burchell describes the Hottentots as passing from extreme laziness to extreme eagerness for action. And the emotional nature of the Bushmen is summed up by Arbrousset as quick, generous, headstrong, vindictive—very noisy quarrels are of daily occurrence. “father and son will attempt to kill each other” Of the scattered societies inhabiting the Eastern Archipelago, those formed of Malays, or in which the Malay-blood predominates, do not exhibit this trait. The Malagasy are said to have “passions never violently excited”—are not quick in resenting injuries, but cherish the desire for revenge, and the pure Malay is described as not demonstrative. The rest, however, have the ordinary variability. Among the Negrittos, the Papuan is “impetuous, excitable, noisy”; the Fijians have “emotions easily roused but transient,” and “are extremely changeable in their disposition”; the Andamanese “are all frightfully passionate and revengeful”; and we are told of the Tasmanians that, “like all savages, they quickly change from smiles to tears.” So, too, of the other lowest races: there are the Fuegians, who “have hasty tempers,” and “are loud and furious talkers”; there are the Australians, whose impulsiveness Sturt implies by saying that the “angry Australian *jin* exceeds the European scold,” and that a man “remarkable for haughtiness and reserve sobbed long when his nephew was taken from him.” Bearing in mind that such non-impulsiveness as is shown by the Malays occurs

in a race that has reached a considerable degree of civilization; and that the lowest races, as the Andamanese, Tasmanians, Fuegians, Australians, betray impulsiveness in a very decided manner, we may safely assert it to be a trait of primitive man, possessed, probably, in a greater degree than is implied by the above quotations. What the earliest character was, we may best conceive by reading the following vivid description of a Bushman. Asserting his simian appearance, Lichstenstein continues:—

“What gives the more verity to such a comparison was the vivacity of his eyes, and the flexibility of his eyebrows, which he worked up and down with every change of countenance. Even his nostrils and the corners of his mouth, nay his very ears, moved involuntarily, expressing his hasty transitions from eager desire to watchful distrust. * * When a piece of meat was given him, and half-rising he stretched out a distrustful arm to take it, he snatched it hastily, and stuck it immediately into the fire, peering around with his little keen eyes, as if fearing that some one should take it away again.—all this was done with such looks and gestures, that anyone must have been ready to swear he had taken the example of them entirely from an ape.”

Indirect evidence that early human nature differed from later human nature by having this extreme emotional variability, is yielded us by the contrast between the child and the adult among ourselves. For on the hypothesis of evolution, the civilized man, passing through phases representing phases passed through by the race, will, early in life, betray this impulsiveness which the early race had. The saying that the savage has the mind of a child with the passions of a man (or, as it would be more correctly put, has adult passions which act in a childish manner) thus possesses a deeper meaning than appears. There is a genetic relationship between the two natures such that, allowing for differences of kind and degree in the emotions, we may regard the co-ordination of them in the child as fairly representing the co-ordination in the primitive man.

§ 34. The more special emotional traits are in large part

dependent on, and further illustrative of, this general trait. This relative impulsiveness, this smaller departure from primitive reflex action, this lack of the re-representative emotions which hold the simpler ones in check, is accompanied by improvidence.

The Australians are described as "incapable of anything like persevering labour the reward of which is in futurity." According to Kolben, the Hottentots are "the laziest people under the sun;" and we are told that with the Bushmen it is "always either a feast or a famine." Passing to the indigenes of India, it is said of the Todas that they are "indolent and slothful", of the Bhils, that they have "a contempt and dislike to labour"—will half starve rather than work, while of the Santals we read that they have not "the unconquerable laziness of the very old Hill-tribes." So, from Northern Asia, the Kirghiz may be taken as exemplifying idleness: and in America, we have the fact that none of the aboriginal peoples, if uncoerced, show capacity for industry. In the North, cut off from his hunting-life, the Indian, capable of no other, decays and disappears; and in the South, the tribes disciplined by the Jesuits lapsed into their original state, or a worse, when the stimuli and restraints ceased. All which facts are in part ascribable to inadequate consciousness of the future—feeble grasp of distant results. Where, as among the Sandwich Islanders and in sundry Malayo-Polynesian societies, we find considerable industry, it goes along with such a social state as implies discipline throughout a long past: conditions have caused considerable divergence from the primitive nature. It is true that perseverance with a view to remote benefit occurs among savages. They bestow much time and pains on their weapons, etc.: six months to make as many arrows, a year in hollowing out a bowl, and many years in drilling a hole through a stone. But in these cases, beyond the fact that the benefits are simple, direct, and conspicuous, it is to be observed that little muscular effort is required, and that the

activity is thrown on perceptive faculties which are constitutionally active.*

A trait which naturally goes along with inability so to conceive the future as to be influenced by the conception, is a childish mirthfulness—merriment not sobered by thought of what is coming. Though sundry races of the New World, along with their general impassiveness, are little inclined to gaiety, and though among the Malay races and the Dyaks, gravity is a characteristic, yet generally it is otherwise. Of the New Caledonians, Fijians, Tahitians, New Zealanders, we read that they are always laughing and joking. Throughout Africa, too, the Negro shows us everywhere this same trait; and of other races, in other lands, the various descriptions of various travellers are—"full of fun and merriment," "full of life and spirits," "merry and talkative," "sky-larking in all ways," "boisterous gaiety," "laughing immoderately at trifles." Even the Esquimaux, notwithstanding all their privations, are described as "a happy people." We have but to remember how greatly habitual anxiety about coming events, moderates the flow of spirits—we have but to contrast the lively but improvident Irishman with the grave but provident Scot—to see that there is a relation between these traits in the uncivilized man. The relatively-impulsive nature, implying total absorption in a present pleasure, causes at the same time these excesses of gaiety and this inattention to threatened evils.

Along with the trait of improvidence there goes, both

* It should be remarked as a qualifying fact, which has its physiological, as well as its sociological, interest, that the characters of men and women are in sundry cases described as unlike in power of application. Among the Bhils, while the men hate labour, many of the women are said to be industrious. Among the Kookies, too, the women are "quite as industrious and indefatigable as the Naga women" the men of both tribes being lazy. Similarly in Africa. In Loango, though the men are inert, the women "give themselves up to" husbandry "with indefatigable ardour"; and our recent experiences on the Gold-Coast show that a like contrast holds there. The establishment of this difference seems to imply the limitation of heredity by sex.

as cause and consequence, an undeveloped proprietary sentiment. When thinking about the nature of the savage, we overlook the fact that he lacks the extended consciousness of individual possession, and that under his conditions it is impossible for him to have it. Established, as the sentiment can be, only by multitudinous experiences of the gratifications which possession brings, continued through successive generations, it cannot arise where the circumstances do not permit these experiences. Beyond the few rude appliances ministering to his bodily wants, the primitive man has nothing that he can accumulate—there is no sphere for an acquisitive tendency. Where he has grown into a pastoral life, there arises a possibility of benefits from increased possessions—he profits by multiplying his flocks. Still, while he remains nomadic, it is difficult to supply his flocks with unfailing food when they are large, and he has increased losses from enemies and wild animals; so that the benefits of accumulation are kept within narrow limits. Only as the agricultural state is reached, and only as the tenure of land passes from the tribal form, through the family form, to the individual form, is there a widening of the sphere for the proprietary sentiment.

So that the primitive man, distinguished by his improvidence, distinguished also by deficiency of that desire to own which checks improvidence, is, by his circumstances, debarred from the experiences which develop this desire and diminish the improvidence.

§ 35. Let us turn now to those emotional traits which directly affect the formation of social groups. Varieties of mankind, as we now find them, are social in different degrees; and, further, they are distinguished by different degrees of independence—are here tolerant of restraint and there intolerant of it. Clearly, the proportions between these two characteristics must greatly affect the social union.

Describing the Mantras, indigenes of the Malay peninsula,

père Bourrien says—"liberty seems to be to them a necessity of their very existence;" "every individual lives as if there were no other person in the world but himself;" they separate if they dispute. So, too, of the wild men in the interior of Borneo, "who do not associate with each other"; and whose children, when "old enough to shift for themselves, usually separate, neither one afterwards thinking of the other." A nature of this kind manifestly precludes social development; and it shows its effects in the solitary families of the wood-Veddahs, or those of the Bushmeh, whom Arbrousset describes as "independent and poor beyond measure, as if they had sworn to remain always free and without possessions." Of sundry races that remain in a low state, this trait is remarked, as in South America, among the Araucanians, "the Mapuché is impatient of contradiction, and brooks no command;" as, according to Bates, among the Indians of Brazil, who, tractable when quite young, begin to display "impatience of all restraint at puberty," as among the Caribs, who were "impatient under the least infringement" of their independence. Sundry of the Hill-tribes of India, too, exhibit a kindred nature. The savage Bhils have "a natural spirit of independence;" the Bodo and Dhimal "resist injunctions injudiciously urged, with dogged obstinacy," and the Lepchas "undergo great privations rather than submit to oppression." This impediment to social evolution we meet with again among some nomadic races. "A Bedouin," says Burckhardt, "will not submit to any command, but readily yields to persuasion," and he is said by Palgrave to have "a high appreciation of national and personal liberty," and "a remarkable freedom from anything like caste feeling in what concerns ruling families and dynasties." That this moral trait is injurious during early stages of social progress, is in some cases observed by travellers, as by Earl, who says of the New Guinea people that their "impatience of control" precludes organization.

Not, indeed,

that absence of independence will of itself cause an opposite result. The Kamtschadales, according to Grieve, exhibit "slavishness to people who use them hard," and "contempt of those who treat them with gentleness," and Galton, describing the Damaras as having "no independence," says they "court slavery"—that "admiration and fear" are their only strong sentiments. A certain proportion between the feelings prompting obedience and prompting resistance, seems required. The Malays, who have evolved into several semi-civilized societies, are said to be submissive to authority, and yet each is "sensitive to any interference with the personal liberty of himself or another." Clearly, however, be the cause of submission what it may—whether want of self-assertion, or fear, or awe of superiority, which, separately and together, in different proportions, favour subordination—a relatively-subordinate nature is everywhere shown by men composing social aggregates of considerable sizes. In such semi-civilized societies as tropical Africa contains, it is conspicuous; and it was manifest in the peoples who formed the extinct oriental societies, as also in those who formed the extinct societies of the New World.

If, as among the Mantras above named, intolerance of restraint is joined with want of sociality, there is a double obstacle to social union—a cause of dispersion is not checked by a cause of aggregation. If, as among the Todas, a man will sit inactive for hours, "seeking no companionship," he is under less temptation to tolerate restrictions than if solitude is unbearable. Clearly, the ferocious Fijian in whom, strange as it seems, "the sentiment of friendship is strongly developed," is impelled by this sentiment, as well as by his extreme loyalty, to continue in a society in which despotism based on cannibalism is without check.

When we average the evidence, first as presented by the very lowest men, who group themselves socially to the smallest extent, and then as presented by more advanced

men, forming larger aggregates, we find warrant for saying that primitive men, who, before any arts of life were developed, necessarily lived on wild food, implying wide dispersion of small numbers, were, on the one hand, not much habituated to associated life, and were, on the other hand, habituated to that uncontrolled following of immediate desires which goes along with separateness. So that while the attractive force was small the repulsive force was great. Only as primitive men were impelled into greater gregariousness by local conditions which furthered the maintenance of many individuals in a small area, could there come that increase of sociality required to check unrestrained action. And here we see yet a further difficulty which stood in the way of social evolution at the outset.

§ 36. Led as we thus are from emotions of an exclusively-egoistic kind to emotions which imply the presence of other individuals, we will take first the ego-altruistic. (*Prin. of Psy*, §§ 519—23) Before there exist in considerable degrees the sentiments which find satisfaction in the happiness of others, there exist in considerable degrees the sentiments which find satisfaction in the admiration given by others. Even animals show themselves gratified by applause after achievement; and in men the gregarious life early opens and enlarges this source of pleasure.

Great as is the vanity exhibited by the civilized, it is exceeded by that which the uncivilized exhibit. The red pigment and the sea-shells pierced for suspension, found with other traces of men in the Dordogne caves, show us that in that remote past when the rein-deer and the mammoth inhabited the south of France, men drew to themselves admiring glances by colours and ornaments. Self-decoration occupies the thoughts of a savage chief even more than it does the thoughts of a fashionable lady among ourselves. The painting of the skin, about which so much trouble is taken before the use of clothing is established, shows

this. It is shown again by submission to prolonged and repeated tortures while being tattooed; and by tolerance of those pains and inconveniences which accompany the distension of the under-lip by a block of wood, the wearing of stones in holes made through the cheeks, or of quills through the nose. The strength of the desire to gain approbation is, in these cases, proved by the universality of the fashion in each tribe, and by the rigour with which it is enforced. When the age comes, there is no escape for the young savage from the ordained mutilation. The North-American brave, enduring the tortures of initiation, does not question the authority of usage. Fear of the frowns and taunts of his fellows and desire for their praise, constitute a motive so strong that dissent is almost unknown.

It is thus, too, in large measure with the regulation of conduct. The precepts of the religion of enmity are, in early stages of social development, enforced mainly by the aid of this ego-altruistic sentiment. The duty of blood-revenge is made imperative by tribal opinion. Approval comes to the man who, having lost a relative, never ceases his pursuit of the supposed murderer; while scowls and gibes make intolerable the life of one who fails. Similarly with the fulfilment of various usages that have become established. In some uncivilized societies it is not uncommon for a man to ruin himself by a funeral feast; and in some semi-civilized societies, one motive for killing a female child is avoidance of the future cost of a marriage-festival—a cost made great by the prevailing love of display.

This ego-altruistic sentiment, probably increasing in strength during a long period as social aggregation advances, we have here to note chiefly because it is at first an important controlling agency; as, indeed, it continues still to be. Joined with sociality, it has ever been a power helping to hold together the units of each group, and tending to cultivate a conduct furthering the welfare of the group. Probably a kind of subordination was produced by it before

there was any political subordination ; and, indeed, in some cases it secures social order even now. Mr. Wallace says :—

I have lived with communities of savages in South America and in the East, who have no laws or law courts but the public opinion of the village freely expressed. Each man scrupulously respects the rights of his fellow, and any infraction of those rights rarely or never takes place. In such a community all are nearly equal."

§ 37. There remain to be glanced at those traits of the primitive nature due to presence or absence of the altruistic sentiments. These, having sympathy for their root, must, on the hypothesis of evolution, develop in proportion as the circumstances make sympathy active ; that is—in proportion as they favour the maintenance of the marital and parental relations, in proportion as they foster sociality, and in proportion as they do not cultivate aggressiveness.

To what extent the facts justify this *a priori* inference, it is not easy to say : the evidence is very difficult to disentangle and to generalize. Many causes conspire to mislead us. We assume that there will be tolerable uniformity in the manifestations of character in each race ; but it is not so. Both the individuals and the groups differ considerably ; as in Australia, where, according to Sturt, one tribe "is decidedly quiet," and another "decidedly disorderly." We assume that the traits shown will be similar on successive occasions, which they are not : the behaviour to one traveller is unlike the behaviour to another ; probably because their own behaviours were unlike. Very generally, too, the displays of character by an aboriginal race revisited, are determined by the treatment received from previous visitors : being changed from friendliness to enmity by painful experiences. Thus, of Australian travellers, it is remarked that the earlier speak more favourably of the natives than the later ; and, similarly, it is said by Earl of the Java people, that those inhabiting parts little visited by Europeans "are much superior in point of

morality to the natives of the north coast," whose intercourse with Europeans has been greater. When, as a result of his experiences in the Pacific, we find Captain Erskine saying, "nor it is at all beyond the range of probability that habits of honesty and decorum may yet be forced upon the foreign trader by those whom he has hitherto been accustomed to consider as the treacherous and irreclaimable savages of the sandal-wood islands", when we learn that in Vate, one of the New Caledonia Islands, the native name for a white man is a "sailing profligate"; and when we remember that worse names are justified by recent doings in those regions, we shall understand how, on different occasions, the conduct met with from native races may be widely different, and how conflicting statements about native characters may result.

Beyond the difficulty hence arising, is the difficulty arising from that impulsiveness already described, which itself leads to a variability perplexing to one who would form a conception of the average nature. As Livingstone says of the Makololo—"It would not be difficult to make these people appear excessively good or uncommonly bad"; and the inconsistent traits above quoted from Captain Burton, imply a parallel experience. So that in respect of these, as in respect of other emotional characters, we have to strike an average among manifestations naturally chaotic, which are further distorted by the varying relations to those who witness them.

We may best guide ourselves by taking, first, not the altruistic sentiments proper, but the feeling which habitually co-operates with them—the parental instinct, the love of the helpless. (*Prin. of Psy.*, § 532) Of necessity the lowest human races, in common with inferior animals, have large endowments of this; since deficient endowment of it must ever be followed by disappearance of the species or the variety. On the average, those only can survive in posterity in whom the love of offspring prompts due care of

offspring ; and among the savage, the self-sacrifice required is as great as, or perhaps greater than, among the civilized. Hence the fondness for children which even the lowest of mankind display ; though, with the impulsiveness habitual to them, they often join with it great cruelty. Thus the Fuegians, described as “very fond of their children,” nevertheless sell them to the Patagonians for slaves. Great love of offspring is ascribed to the New Guinea people ; and yet a man will “barter one or two” with a trader for something he wants. Eyre states that the natives of Australia are characterized by strong parental affection ; and yet, besides being said to desert sick children, Angas asserts of them that on the Murray they will sometimes kill a boy to bait their hooks with his fat. Though among the Tasmanians the parental instinct is described as having been strong, yet there was infanticide, and a new-born infant was buried alive with its deceased mother ; and though, among the Bushmen, the rearing of offspring under great difficulties implies much self-sacrifice, yet Moffat says they “kill their children without remorse on various occasions.” Not to accumulate further proofs of love of offspring on the one hand, qualified on the other by examples of a violence which will slay a child for letting fall something it was carrying, we may safely say of the primitive man that his philoprogenitiveness is strong, but its action, like that of his emotions in general, irregular.

Keeping this in mind, we shall be aided in reconciling the conflicting accounts of his excessive egoism and his fellow feeling—his cruelty and his kindness. Of the Fuegians we read that they are affectionate towards each other ; and yet that in times of scarcity they kill the old women for food. Mouat, who describes the Andamanese as a “merciless race,” nevertheless says that the one he took to Calcutta had a very kind and amiable character. Many and extreme cruelties may be proved against the Australians. Yet Sturt and Eyre unite in testifying to their kindness,

their self-sacrifice, and even their chivalry. So, too, of the Bushmen. Lichtenstein thinks that in no savage is there "so high a degree of brutal ferocity;" but Moffat was "deeply affected by the sympathy of these poor Bushmen," and Burchell says that they show to each other "hospitality and generosity often in an extraordinary degree." Thus among the very lowest types of men there is not that unqualified brutality which we associate with the name savage; and when we come to races higher in social state, the testimonies to traits of good feeling are abundant. The New Caledonians are said to be "of a mild and good-natured temper;" the Tannese are "ready to do any service that lies in their power;" the New Guinea people are "good-natured," "of a mild disposition." Passing from the Negritos to the Malayo-Polynesians, we meet with like characteristics. The epithets applied to the Sandwich Islanders are "mild, docile," to the Tahitians, "cheerful and good-natured;" to the Dyaks, "genial," to the Sea-Dyaks, "sociable and amiable;" to the Javans, "mild," "cheerful and good-humoured;" to the Malays of Northern Celebes, "quiet and gentle." We have, indeed, in other cases, quite opposite descriptions. In the Tupis of South America, revenge is said to be the predominant passion: a trapped animal they kill with little wounds that it may "suffer as much as possible." The leading trait ascribed to the Fijians is "intense and vengeful malignity." Galton condemns the Damaras as "worthless, thieving, and murderous," and Anderson as "unmitigated scoundrels." In some cases allied tribes show us these opposite natures; as do the aborigines of India. While the Bhils are reputed to be very cruel, very revengeful, and ready to play the assassin for a trifling recompense, the Nagas are described as "good-natured and honest;" the Bodo and Dhimal as "full of amiable qualities," "honest and truthful," "totally free from arrogance, revenge, cruelty;" and of the Lepcha, Dr. Hooker says—"his disposition is really amiable."

“peaceful and no brawler:” “thus contrasting strongly with his neighbours east and west.”

Without further detail, it will be manifest enough that the primitive man, if he has but little active benevolence, is not, as often supposed, distinguished by active malevolence. Indeed, a glance over the facts tends rather to show that while wanton cruelty is not common among the least civilized, it is common among the more civilized. The sanguinary Fijians have reached a considerable social development. Burton says of the Fan that “cruelty seems to be with him a necessary of life;” and yet the Fans have advanced arts and appliances, and live in villages reaching, some of them, four thousand inhabitants. In Dahomey, where a large population considerably organized exists, the love for bloodshed leads to frequent horrible sacrifices; and we have but to study the social system of the ancient Mexicans, rooted as it was in cannibalism, and yet highly evolved in many ways, to see that it is not the lowest races which are the most inhuman.

Help in rightly estimating the moral nature of the primitive man, is furnished us by the remark of Mr. Bates, that “the goodness of these Indians, like that of most others amongst whom I lived, consisted perhaps more in the absence of active bad qualities, than in the possession of good ones; in other words, it was negative rather than positive. * * * The good-fellowship of our Cucámas seemed to arise, not from warm sympathy, but simply from the absence of eager selfishness in small matters.” And we shall derive further help in reconciling what seem contradictory traits, by observing how the dog unites great affectionateness, sociality, and even sympathy, with habitual egoism and bursts of ferocity—how in his behaviour he passes readily from playful friendliness to fighting, and while at one time robbing a fellow dog of his food will at another succour him in distress.

One kind of evidence, however, there is which amid all these conflicting testimonies, yields us tolerably-safe guidance—the treatment of women. The status of women among any people, and the habitual behaviour to them, indicate with approximate truth, the *average* power of the altruistic sentiments; and the indication thus yielded tells against the character of the primitive man. Often the actions of the stronger sex to the weaker among the uncivilized are brutal; generally the weaker are treated as mere belongings, without any regard for their personal claims, and even at best the conduct towards them is unsympathetic. That this slavery, often joined with cruelty, and always with indignity, should be the normal condition among savages, accepted as right not by men only but by women themselves, proves that whatever occasional displays of altruism there may be, the ordinary flow of altruistic feeling is small.

§ 38. As preliminary to a summary of these leading emotional traits, I may here add one which affects all the others—the fixity of habit—a trait connected with that of early arrival at maturity, similarly added at the close of the last chapter. The primitive man is conservative in an extreme degree. Even on contrasting higher races with one another, and even on contrasting different classes in the same society, it is observable that the least developed are the most averse to change. Among the common people an improved method is difficult to introduce; and even a new kind of food is usually disliked. The uncivilized man is thus characterized in a still greater degree. His simpler nervous system, sooner losing its plasticity, is still less able to take on a modified mode of action. Hence both an unconscious adhesion, and an avowed adhesion, to that which is established. “Because same ting do for my father, same ting do for me,” say the Houssa negroes. The Creek Indians laughed at those who suggested that they should “alter their long-established customs and habits of

living." Of some Africans Livingstone says—"I often presented my friends with iron spoons, and it was curious to observe how the habit of hand-eating prevailed, though they were delighted with the spoons. They lifted out a little [milk] with the utensil, then put it on the left hand, and ate it out of that." And the way in which this tendency leads to unchangeable social usages, is well shown by a story told of the Dyaks, who, as Mr. Tylor says, "marked their disgust at the innovation by levying a fine on any of their own people who should be caught chopping in the European fashion."

Recapitulating the emotional traits, severally made more marked by this relative fixity of habit, we have first to note the impulsiveness which, pervading the conduct of primitive men, so greatly impedes co-operation. That "wavering and inconstant disposition," which commonly makes it "impossible to put any dependence on their promises," negatives that trust in mutual obligations on which social progress largely depends. Governed as he is by despotic emotions that successively depose one another, instead of by a council of the emotions in which they all take part, the primitive man has an explosive, chaotic, incalculable behaviour, which makes combined action very difficult.

One of the more special traits, partly dependent on this general trait, is his improvidence. The immediate desire, be it for personal gratification or for the applause which generosity brings, excludes fear of future evils; while pains and pleasures to come, not being vividly conceived, there is no adequate spur to exertion, but a light-hearted, careless absorption in the present.

Sociality, strong in the civilized man, is less strong in the savage man. Among the lowest types the social groups are very small, and the bonds holding their units together are relatively feeble. Along with a tendency to disruption resulting from the ill-controlled passions of the individuals, there goes comparatively little of the sentiment causing cohesion: each of

these traits tending, in fact, to perpetuate the other. So that, under conditions furnishing perpetual causes of dissension among men carried from one extreme to another by gusts of feeling—men often made more irritable by hunger, which, as Livingstone remarks, “has a powerful effect on the temper”—there exists at once a smaller tendency to cohere from mutual liking, and a greater tendency to resist an authority otherwise causing cohesion

Though, before there is much sociality, there cannot be much of any feeling to which the presence of other persons is a pre-requisite, and cannot therefore be much love of approbation; yet, with a moderate progress in social grouping, there comes a development of this simplest of the higher sentiments. The great, and quickly realized, benefits brought by the approval of fellow-savages, and the serious evils soon following their anger or contempt, are vivid early experiences which foster this ego-altruistic sentiment into predominance. And by it some subordination to tribal opinion is secured, and some consequent regulation of conduct, even before there arises a rudiment of political control.

In social groups once permanently formed, the bond of union—here an increased love of society, there a subordination caused by admiration of superior power, elsewhere a dread of threatened penalties, and in most places a combination of these—may go along with a very variable amount of altruistic feeling. Though sociality fosters sympathy, yet the daily activities of the primitive man repress sympathy. Such fellow-feeling as results from that instinctive love of the helpless which he possesses in common with inferior animals, he naturally shows on occasions when antagonism, or strong egoistic desire, does not come into play. But active fellow-feeling, ever awake and ever holding egoism in check, does not characterize him; as we see conclusively shown by the treatment of women. And that highest form of altruistic sentiment distinguished by us as a sense of justice, implying clear

and far-reaching consciousness of effects which conduct will entail on others, is very little developed.

These emotional traits of the primitive man, exhibited by the evidence when averaged, are congruous with those which, drawing inferences from the principles of Psychology, we anticipated would distinguish his imperfectly-evolved mind. A less extended and less varied correspondence with the environment, less representativeness, less remoteness from reflex action, are observable in all these peculiarities. The cardinal trait of impulsiveness implies the sudden, or approximately-reflex, passing of a single passion into the conduct it prompts; implies, by the absence of opposing feelings, that the consciousness is formed of fewer and simpler representations; and implies that the adjustment of internal actions to external actions does not take account of distant consequences—has not so wide a range in space and time. So with the improvidence to which this impulsiveness conduces: desire goes at once to gratification; there is feeble imagination of secondary results, remote needs are not met. Passing over intolerance, of restraint and defect of sociality, which are special traits that may or may not coexist with an emotional character otherwise inferior, we come to the ego-altruistic sentiment of love of approbation. This, growing as gregariousness increases, involves increased representativeness: since, instead of direct egoistic gratification it contemplates gratification indirectly caused by the behaviour of others; instead of immediate results it contemplates results a stage further off, instead of actions prompted by single desires, there come actions checked and modified by secondary desires. But though the emotional nature in which this ego-altruistic sentiment becomes dominant, is made by its presence less reflex, more representative, and adjusted to a wider and more heterogeneous correspondence with surrounding requirements, it is still, in these respects, below that developed emotional nature of the

civilized man, marked by activity of the altruistic sentiments. Lacking these, the primitive man lacks the benevolence which adjusts conduct for the benefit of others distant in space and time, the equity which implies representation of highly complex and abstract relations among human actions, the self-sacrifice which puts a curb on egoism when there are none present to applaud.

To which congruity between the *à priori* and *à posteriori* conclusions, we may add the harmony of these with two others which the hypothesis of evolution suggests. That the child of the civilized man is impulsive, is improvident, is in infancy without the love of applause but shows this in early childhood, and only afterwards begins to exhibit a sense of justice, are facts which verify the above inferences respecting the emotional nature of the primitive man. And we get further verification of them on observing that the leading emotional traits which distinguish the civilized man from him, are such as could arise only as society progressed. Impulsiveness could diminish only as social restraints became established; improvidence could decrease only as a settled social state made the benefits of providence tolerably certain; and sympathy, with the altruistic sentiments resulting from it, could grow strong only in proportion as men were continuously held in close relations, involving co-operation, mutual benefit, and consequent mutual giving of pleasure.

CHAPTER VII.

THE PRIMITIVE MAN—INTELLECTUAL.

§ 39. THE three measures of mental evolution which, in the last chapter, helped us to delineate the emotional nature of the primitive man, will, in this chapter, help us to delineate his intellectual nature. Degree of intelligence is shown by degree of correspondence between Thoughts and Things, it is shown by degree of representativeness in the constitution of those thoughts; it is shown by their degree of departure from the relatively-automatic intellectual processes—their remoteness from reflex action. Before surveying the facts for purposes of induction, it will be well to contemplate, under their more concrete forms, the intellectual traits characterizing a lower evolution as compared with a higher. These traits, set forth at length in the *Principles of Psychology* (§§ 484—93), may here be briefly recapitulated in connection with the above-named standards.

Familiar only with the particular facts coming within the narrow range of his experiences, the primitive man has no conceptions of *general facts*. Being something common to many particular truths, a general truth implies a wider and more heterogeneous correspondence than do particular truths; it implies higher representativeness, since it necessarily colligates more numerous and varied ideas under the general idea; and it is more remote from

reflex action—will not, indeed, of itself, excite action at all.

Having only those indefinite measures of time yielded by the seasons, having no records, but only statements carelessly made and randomly repeated in language that is very imperfect, man, in his uncivilized state, cannot recognize long sequences. Successions in which antecedents and consequents are tolerably near, can be fully grasped; but no others. Hence *prediction of distant results*, such as is possible in a settled society having measures and written language, is impossible to him. That is to say, the correspondence in Time comes within narrow limits. The representations include few relations of phenomena, and these not comprehensive ones. And there is but a moderate departure from the reflex life in which stimulus and act stand in immediate connection.

The environment of the primitive man being such that his converse with things is relatively restricted in Space and Time, as well as in variety, it happens that the associations of ideas he forms are little liable to be changed. As experiences (multiplying in number, gathered from a wider area, added to by those which other men record) become more heterogeneous, the narrow notions first framed, fixed in the absence of conflicting experiences, are shaken and made more plastic—there comes greater *modifiability of belief*. In the relative rigidity of belief characterizing undeveloped intelligence, we see a smaller correspondence with an environment containing facts destructive of that belief, we see less of that representativeness which simultaneously grasps and averages much evidence; and we see a smaller divergence from those lowest mental actions in which impressions cause, irresistibly, the appropriate motions.

While the experiences are few and but slightly varied, the concreteness of the corresponding ideas is but little qualified by the growth of *abstract ideas*. An abstract idea, being one drawn from many concrete ideas,

becomes detachable from these concrete ideas only as fast as their multiplicity and variety leads to mutual cancellings of their differences, and leaves outstanding that which they have in common. Obviously an abstract idea so generated, implies an increase of the correspondence in range and in heterogeneity, it implies increased representativeness in the consciousness of the many concretes whence the idea is abstracted; and it implies greater remoteness from reflex action. It must be added that such abstract ideas as those of *property* and *cause*, presuppose a still higher stage in this knowledge of objects and actions. For only after many special properties and many special causes have been thus abstracted, can there arise the re-abstracted ideas of property in general and cause in general.

The conception of *uniformity* in the order of phenomena, develops along with this progress in generalization and abstraction. Not uniformity but multiformity is the dominant trait in the course of things as the primitive man witnesses it. No two places are alike, no two men, no two trees, rivers, stones, days, storms, quarrels. Only along with the use of *measures*, when social advance initiates it, does there grow up the means of ascertaining uniformity; and only after a great accumulation of measured results does the idea of *law* become possible. Here, again, the indices of mental evolution serve. The conception of natural order presupposes an advanced correspondence; it involves a re-representativeness that reaches a high degree; and the implied divergence from reflex action is extreme.

Until there have grown up general ideas and abstract ideas, and until the notion of uniformity has developed along with the use of measures, thought cannot have much *definiteness*. Inequality and unlikeness being characteristic of primitive experiences, there is little to yield the idea of agreement; and so long as there are few experiences of exact equality between objects, or perfect conformity

between statements and facts, or complete fulfilment of anticipations by results, the notion of *truth* cannot become clear. This is a highly-evolved notion, arising only after the antithesis between definite agreement and definite disagreement has been made familiar, and the experiences of the primitive man do not make it familiar. Once more our general tests answer. The conception of truth, being the conception of correspondence between Thoughts and Things, implies advance of that correspondence; it involves representations which are higher, as being better adjusted to realities; and its growth causes a decrease of the primitive credulity allied to reflex action—allied, since it shows us single suggestions producing sudden beliefs that forthwith issue in conduct. Further, it should be remarked that only as this conception of truth advances, and therefore the correlative conception of untruth, can there come *scepticism* and *criticism*.

Lastly, such imagination as the primitive man has, small in range and heterogeneity, is *reminiscent* only, not *constructive* (see *Prin. of Psy.*, § 192). In proportion as the mental development is low, the mind merely receives and repeats—cannot initiate, has no originality. An imagination which invents, shows us an extension of the correspondence from the region of the actual into that of the potential; it shows us a representativeness not limited to combinations which have been, or are, in the environment, but including non-existing combinations thereafter made to exist; and it exhibits the extremest remoteness from reflex action, since the stimulus issuing in movement is unlike any that ever before acted.

And now, having enumerated these leading traits of intellectual evolution in its latter stages, as deduced from psychological principles, we are prepared to observe the facts as described by travellers, and to see their significance. We will begin with some most general ones harmonizing with, if not directly implied by, the above inferences.

§ 40. Testimonies to the acute senses and quick perceptions of the uncivilized, are given by nearly everyone who describes them.

Take first the senses. According to Lichtenstein, the vision of the Bushmen is telescopic; and Barrow speaks of his "keen eye always in motion." Of Asiatics may be named the Karens, who see as far with naked eyes as we do with opera-glasses; and the inhabitants of the Siberian steppes are celebrated for their "distant and perfect sight." Similarly in America. Herndon says of the Brazilians—"The Indians have very keen senses, and see and hear things that are inaudible and invisible to us;" while Southey makes a like remark of the Tupis. After observing of the Abipones that, "like apes, they are always in motion," Dobrizhoffer asserts that they discern things which escape "the most quick-sighted European." Respecting hearing, too, there is similar, if less abundant, evidence. We have all heard of the feats of North American Indians in detecting faint sounds, and the extremely acute hearing of the Veddahs is shown by their habit of finding bees' nests by the hum.

Still more abundant are the testimonies respecting the active and minute observation to which this keenness of vision and hearing is instrumental. From every quarter of the globe there come illustrations. "Excellent superficial observers," is the characterization Palgrave gives of the Bedouins. Burton speaks of the "high organization of the perceptive faculties" among them; and Petherick proved, by a test, their marvellous powers of tracking. Similarly in South Africa, the Hottentots show "astonishing quickness in everything relating to cattle;" and Galton says the Damaras "have a wonderful faculty of recollecting any ox that they have once seen." Among the natives of North America it is the same. Burton, speaking of the Prairie Indians, comments on the "development of the perceptions which is produced by the constant and minute

observation of a limited number of objects." Instances are given showing what extremely exact topographers the Chippewayans are, and the like is alleged of the Dakotahs. "It is, however, respecting the wild races of South America that we have the most remarkable testimonies. Bates notices the extraordinary "sense of locality" of the Brazilian Indians. Concerning the Arawaks, Hillhouse says— "Where an European can discover no indication whatever, an Indian will point out the footsteps of any number of negroes, and will state the precise day on which they have passed, and if on the same day he will state the hour." Brett asserts that a member of a Guiana tribe "will tell how many men, women, and children have passed, where a stranger could only see faint and confused marks on the path." "Here passes one who does not belong to our village," said a native of Guiana searching for tracks; and Schomburgh, who gives this instance, remarks that their power "borders on the magical."

Along with this acuteness of perception there naturally goes a high degree of skill in those simple actions depending on the immediate guidance of perception. The Esquimaux show "invention and dexterity in all manual works." Kolben asserts that the Hottentots "are very dexterous in the use of their weapons." The Fuegians are said to be "remarkably expert with their slings." The skill of the Andamanese is shown in their unerring shots with arrows at forty or fifty yards. We are told of the Tongans that they "are great adepts in managing their canoes." The accuracy with which the Australian propels a spear with his throwing-stick, is remarkable; while all have heard of his feats with the boomerang. And from the Hill-tribes of India, the Santals may be singled out as so "very expert with the bow and arrow" that they kill birds on the wing, and knock over hares at full speed.

Not omitting the fact that there are some exceptions to this expertness, as among the now extinct Tasmanians and

the Veddahs of Ceylon; and observing that survival of the fittest must ever have tended to establish these traits among men whose lives from hour to hour depended on their keen senses, quick observations, and efficient uses of their weapons; we have here to note this trait as significant in its implications. For in virtue of a general antagonism between the activities of the simpler faculties and the activities of the more complex faculties, it results that this dominance of the lower intellectual life hinders the higher intellectual life. In proportion as the mental energies go out in restless and multitudinous perception, they cannot go out in calm and deliberate thought. This truth we will contemplate from another point of view.

§ 41 Not having special senses by which to discriminate, the worm swallows bodily the mould containing vegetal matter partially decayed. leaving its alimentary canal to absorb what small quantity of nutriment it can, and to eject, in the shape of worm-cast, the 95 per cent or so that is innutritive. Conversely, the higher annulose creature, with special senses and intelligence, as the bee, selects from plants concentrated nutritive matters wherewith to feed its larvæ, or, as the spider, sucks the ready-prepared nutritive juices from the flies it entraps. Without tracing up through the lower *Vertebrata* a kindred contrast, it will suffice to say that the progress from the less intelligent to the more intelligent and the most intelligent, is similarly accompanied by increasing ability in the selection of food. Taking herbivorous mammals in general, we see that the comparatively innutritive parts of plants have to be devoured by them in great quantities, that the requisite amounts of nutriment may be obtained; while, taking in general the carnivorous animals, which are mostly more sagacious, we see that they live on concentrated foods of which small quantities suffice. Though the monkey and the elephant are not carnivorous, yet both

have powers which, certainly by the one and probably by the other, are used in choosing the nutritive parts of plants when these are to be had. Coming to mankind, we observe that the diet is of the most concentrated kind obtainable; but that the uncivilized man, at the mercy of his conditions, is less choice in his diet than the civilized. Further, it is to be noted that among the most civilized the most nutritive food is carefully separated from waste matters even to the extent that at table fragments of inferior quality are uneaten.

My purpose in drawing attention to these seemingly-irrelevant facts, is to point out that there is an analogy between progress in bodily nutrition and progress in mental nutrition. The higher types of mind, like the higher types of body, have greater powers of selecting materials fit for assimilation. Just as by appearance, texture, and odour, the superior animal is guided in the choice of food, and swallows only things which contain large amounts of organizable matter; so the superior intellect, aided by what we may figuratively call an intellectual scent, passes by multitudes of unorganizable facts, but quickly detects facts of significance, and takes them in as elements out of which cardinal truths may be elaborated. The less-developed intelligences, unable to decompose these more complex facts and assimilate their components, and having therefore no appetites for them, devour with avidity facts which are mostly valueless, and out of the vast mass absorb extremely little material for general conceptions. Such concentrated diet as that furnished by the experiments of the physicist, the investigations of the political economist, the analyses of the psychologist, is intolerable to them, indigestible by them, but instead, they swallow with greediness the trivial details of table-talk, the personalities of fashionable life, the garbage of the police and divorce courts; while their reading, in addition to trashy novels, includes memoirs of mediocrities, volumes of gossiping correspondence, with

an occasional history, from which they carry away a few facts about battles and the doings of conspicuous men. To such minds, devoid of structures for analyzing and systematizing, this kind of intellectual provender is alone available, and to feed them on a higher kind would be as impracticable as to feed a cow on meat.

Suppose this contrast exaggerated—suppose the descent from the higher to the lower intellects among ourselves, to be continued by a second descent of like kind, and we get to the intellect of the primitive man. A still greater attention to minute meaningless details, and a still smaller capacity for selecting facts from which conclusions of worth may be drawn, characterize the mind of the savage. Multitudes of simple observations are from moment to moment made by him; and such few as have significance, lost in the mass of insignificant ones, pass through his mind without leaving behind any materials for thoughts, worthy to be so called. Already in a foregoing section, the extreme perceptive activity of the lowest races has been illustrated; and here may be added a few illustrations showing the reflective inactivity going along with it. In Mr. Bates' account of the Brazilian Indian he remarks—"I believe he thinks of nothing except the matters that immediately concern his daily material wants." "He observes well, but he can deduce nothing profitable from his perceptions," says Burton, describing the East African; and he adds that the African's mind "will not, and apparently cannot, escape from the circle of sense, nor will it occupy itself with aught but the present." Still more definite is the testimony of Mr. Galton respecting the Damara, who "never generalizes;" and who, indeed, seems to be exceptionally stupid. Thus he states that "a Damara who knew the road perfectly from A to B and again from B to C would have no idea of a straight cut from A to C. he has no map of the country in his mind, but an infinity of local details." Even of such a superior type of man as the Bedouin, the remark is made by Mr.

Palgrave, that he "judges of things as he sees them present before him, not in their causes or consequences" Some semi-civilized peoples, as the Tahitians, Sandwich-Islanders, Javans, Sumatrans, Malagasy, etc, do, indeed, manifest "quickness of apprehension, penetration and sagacity." But it is in respect of simple things that their capacity is shown; as witness the assertion of Mr Ellis concerning the Malagasy, that "facts, anecdotes, occurrences, metaphors, or fables, relating to or derived from sensible and visible objects, appear to form the basis of most of their mental exercises." And how general is this trait of unreflectiveness among inferior varieties of man, is implied by Dr. Pickering's statement that, in the course of much experience, the Fijians were the only savage people he had ever met with who could give reasons, and with whom it was possible to hold a connected conversation.

§ 42. "The eccentricity of genius" is a current phrase implying the common experience that men of original powers are men prone to act in ways unlike the ordinary ways. To do what the world does, is to guide behaviour by imitation. To deviate from the usages of the world, is to decline imitation. And the noticeable fact is that a smaller tendency to imitate goes along with a greater tendency to evolve new ideas. Under its converse aspect we may trace this relationship back through early stages of civilization. There was but little originality in the middle ages, and there was very little tendency to deviate from the habits, modes of living, and forms of dress, established for the various ranks. Still more was it so in the extinct societies of the East. Ideas were fixed, and the power of prescription was irresistible.

Among the partially-civilized inferior races, we find imitativeness a marked trait. Everyone has heard of the ludicrous ways in which Negroes, when they have opportunities, dress and swagger in grotesque mimicry of the

whites. A characteristic asserted of the New Zealanders is an aptitude for imitation. The Dyaks, too, show "great love of imitation;" and of other Malayo-Polynesians the like is alleged. Mason says that "while the Karens originate nothing they show as great a capability to imitate as the Chinese" We read that the Kamtschadales have a "peculiar talent of mimicking men and animals," that the Nootka-Sound people "are very ingenious in imitating," that the Mountain Snake Indians "imitate animal sounds to the utmost perfection" From South America there comes like evidence Herndon was astonished at the mimetic powers of the Brazilian Indians. Wilkes speaks of the Patagonians as "admirable mimics" And, describing the Guaranis, Dobrizhoffer joins with his remark that they can imitate exactly, the further remark that they bungle stupidly if you leave anything to their intelligence. But it is among the very lowest races that this proneness to mimicry is most conspicuous Several travellers have commented on the "extraordinary tendency to imitate" shown by the Fuegians They will "repeat with perfect correctness each word in any sentence we address them"—mimicking the manner and attitude of the speaker. So, too, according to Mouat, the Andamanese show high imitative powers; and, like the Fuegians, repeat a question instead of answering it a statement verified by Fytche. Mitchell gives a kindred account of the Australians, who have, he says, a peculiar talent for imitation, and "evinced a strange perversity" "in repeating words" which "they knew were meant as questions"

In this imitativeness, shown in the smallest degree by the highest members of the civilized races and in the greatest degree by the lowest savages, we have a further manifestation of the antagonism between perceptive activity and reflective activity. Among inferior gregarious creatures generally, as rooks that rise in a flock when one rises, or as sheep that follow a leader in leaping, we see an almost

automatic repetition of actions witnessed in others; and this peculiarity, common to the lowest human types—this tendency to “ape” others, as we significantly call it—implies a smaller departure from the brute type of mind. It shows us a mental action which is, from moment to moment, chiefly determined by surrounding incidents; and is therefore but little determined by causes involving excursive-ness of thought, imagination, original idea.

§ 43. Our conception of the primitive man—intellectual, will become clearer when, carrying with us the above inductions, we contemplate the proofs of his feeble grasp of thought.

Common speech fails to distinguish between mental activities of different grades. A boy is called clever who takes in simple ideas rapidly, though he may prove incapable of taking in complex ideas; and a boy is condemned as stupid because he is slow in rote-learning, though his apprehension of abstract truths may be quicker than that of his teacher. Contrasts of this nature must be recognized, if we would interpret the conflicting evidence respecting the capacities of the uncivilized. Even of the Fuegians we read that they “are not usually deficient in intellect;” even the Andamanese are said to be “excessively quick and clever;” and it has been asserted of the Australians that they are as intelligent as the average of our own peasants. But the ability thus referred to as possessed even by men of the lowest types, is one for which the simpler faculties suffice; and, as we shall see, goes along with inability when any demand is made on the complex faculties. A passage which Sir John Lubbock quotes from Mr. Sproat’s account of the Ahts of North America, may be taken as descriptive of the average state. Mr. Sproat says:—

“The native mind, to an educated man, seems generally to be asleep * * * On his attention being fully aroused, he often shows much quickness in reply and ingenuity in argument. But a short conversation

wearies him, particularly if questions are asked that require efforts of thought or memory on his part. The mind of the savage then appears to rock to and fro out of mere weakness."

Similarly in South America, Spix and Martius tell us of the Brazilian Indian that "scarcely has one begun to question him about his language, when he grows impatient, complains of headache, and shows that he is unable to bear the exertion;" and of the same races Mr. Bates says—"It is difficult to get at their notions on subjects that require a little abstract thought." Similarly of the Abipones, Dobrizhoffer remarks that "when they are unable to comprehend anything at first sight, they soon grow weary of examining it, and cry, 'What is it after all?'" Of such more advanced races as the Negroes, there is kindred evidence. Burton says of the East Africans, "ten minutes sufficed to weary out the most intellectual when questioned about their system of numbers." And even of so comparatively superior a race as the Malagasy, it is observed that they "do not seem to possess the qualities of mind requisite for close and continued thought."

When we remember that to frame the idea of a species, say trout, it is needful to think of the characters common to trout of different sizes—when we remember that to conceive of fish as a class, we must imagine many variously-formed kinds of fish, and see mentally the likenesses which unite them notwithstanding their unlikenesses; we perceive that, rising from the consciousness of individual objects to the consciousness of species, and again to the consciousness of genera, and orders, and classes, each further step implies a greater power of grouping in thought numerous things with approximate simultaneity. And perceiving this, we may understand why, lacking the requisite representativeness, the mind of the savage is soon exhausted with any thought above the simplest. Excluding those referring to individual objects, our most familiar propositions, such even as "Plants are green," or "Animals grow,"

are propositions never definitely framed in his consciousness; for the reason that he has no idea of a plant or an animal, apart from kind. And of course until he has become familiar with general ideas and abstract ideas of the lowest grades, those a grade higher in generality and abstractness are inconceivable by him. The nature of primitive intellect thus analytically stated, will be rendered clearer by an illustration taken from Mr. Galton's account of the Damaras, showing how the concrete, made to serve in place of the abstract as far as possible, soon fails, and leaves the mind incapable of higher thought.—

“They puzzle very much after five [in counting], because no spare hand remains to grasp and secure the fingers that are required for units. Yet they seldom lose oxen, the way in which they discover the loss of one is not by the number of the head being diminished, but by the absence of a face they know. When bartering is going on, each sheep must be paid for separately. Thus, suppose two sticks of tobacco to be the rate of exchange for one sheep, it would sorely puzzle a Damara to take two sheep and give him four sticks”—*Tropical S. Africa*, p. 132

This mental state resulting from inability to transcend the concrete, is, in another direction, exemplified by the remark of Mr. Hodgson concerning the Hill-tribes of India. “Light,” he says, “is a high abstraction which none of my informants can grasp, though they readily give equivalents for sunshine and candle or fire-flame.” And it is again exemplified by Spix and Martius, when they say that it would be in vain to seek in the language of the Brazilian Indians “words for the abstract ideas of plant, animal, and the still more abstract notions, colour, tone, sex, species, etc.; such a generalization of ideas is found among them only in the frequently used infinitive of the verbs to walk, to eat, to drink, to dance, to sing, to hear, etc.”

§ 44. Not until there is formed a general idea, by the colligation of many special ideas which have a common trait amid their differences—not until there hence comes the possibility of connecting in thought this common trait with

some other trait also possessed in common, can there arise the idea of a causal relation; and not until many different causal relations have been observed, can there result the conception of causal relation in the abstract. By the primitive man, therefore, such distinction as we make between natural and unnatural cannot be made. Before the notion of a constant order among phenomena is generated by comparison of experiences, there does not exist the antithetical notion of disorder. Just as the child, ignorant of the course of things, gives credence to an impossible fiction as readily as to a familiar fact; so the savage, similarly without classified and systematized knowledge, feels no incongruity between any absurd falsehood propounded to him and some established general truth. there being, for him, no such established general truth.

Hence a credulity which in us would be unnatural, is, in him, perfectly natural. If the young savage takes as his totem, and thereafter regards as sacred, the first animal he dreams about during a fast—if the Negro, as Bosman tells us, when bent on an important undertaking, chooses for a god to help him the first object he sees on going out, and sacrifices to it and prays to it—if the Veddah, failing in a shot with his arrow, ascribes the failure not to a bad aim but to insufficient propitiation of his deity; we must regard the implied conceptions as the normal accompaniments of a mental state in which the organization of experiences has not advanced far enough to evolve the idea of natural causation.

§ 45. An obvious consequence must be specified and illustrated. Absence of the idea of natural causation, implies absence of rational surprise.

Until there has been reached the belief that certain connections in things are constant, there can be no astonishment on meeting with cases seemingly at variance with this belief. The behaviour of the uncultivated among our-

selves teaches us this. Show to a rustic a remarkable experiment, such as the rise of liquid in a capillary tube, or the spontaneous boiling of warm water in an exhausted receiver, and instead of the amazement you looked for, you find a vacant indifference: that which struck you with wonder when first you saw it, because not apparently reconcilable with your general ideas of physical processes, does not seem wonderful to him, because he is without those general ideas. And now if we suppose the rustic divested of what general ideas he has, and the causes of surprise thus made still fewer, we get the mental state of the primitive man.

Of the very lowest races, disregard of novelties is almost uniformly alleged. According to Cook, the Fuegians showed the utmost indifference in presence of things that were entirely new to them. The same voyager observed in the Australians the like peculiarity, and others have described them as remarkably impassive when shown strange objects. According to Dampier, those he had on board "did not notice anything else in the ship" than what they had to eat. So, too, the Tasmanians were characterized by Cook's surgeon as exhibiting no surprise. Captain Wallis asserts of the Patagomians, that "they showed the most unaccountable indifference to everything around them [on shipboard]; even the looking-glass, though it afforded great diversion, excited no astonishment;" and Captain Wilkes testifies to the like. I also find it stated of the village Veddahs that two of them "showed no surprise at a looking-glass." And of the Samoiedes we read in Pinkerton, that "nothing but the looking-glass caused any surprise in them for an instant, again a moment and this ceased to draw their attention."

§ 46. Along with absence of surprise there naturally goes absence of intelligent curiosity; and where there is least faculty of thought, even astonishment may be excited without causing inquiry. Burchell, asserting that the Bushmen

"express no curiosity," says—"I showed them a looking-glass; at this they laughed, and stared with vacant surprise and wonder to see their own faces; but expressed not the least curiosity about it." Where we have testimonies to curiosity we find it among races of not so low a grade. That of the New Caledonians was remarked by Cook, and that of the New Guinea people by Earl and by Jukes. Still more decided is an inquiring nature among the relatively-advanced Malayo-Polynesians. According to Boyle, the Dyaks have an insatiable curiosity. The Samoans, too, "are usually very inquisitive," and the Tahitians "are remarkably curious and inquisitive"—a statement to which is added the comment that astonishment seemed greater among them than among the inferior races.

Evidently this absence of the desire for information about new things, which, as we see, characterizes the lowest mental state, is itself an obstacle to that acquirement of generalized knowledge which makes rational surprise, and consequent rational inquisitiveness, possible. If his "want of curiosity is extreme," as Mr. Bates says of the Cucáma Indian, the implication is that he "troubles himself very little concerning the causes of the natural phenomena around him." Lacking ability to think, and the accompanying desire to know, the savage is without tendency to speculate. Actions perpetually forced on his attention he makes no attempt to explain. So that even when there is raised such a question as that often put by Park to the Negroes—"What became of the sun during the night, and whether we should see the same sun, or a different one, in the morning," no reply is forthcoming. "I found that they considered the question as very childish: * * * they had never indulged a conjecture, nor formed any hypothesis, about the matter."

The general fact thus exemplified we shall do well to keep in mind. It is one quite at variance with current ideas respecting the thoughts of the primitive man. He is commonly pictured as theorizing about surrounding appear-

ances ; whereas, in fact, the need for explanations of them does not occur to him.

§ 47 One more concomitant of this undeveloped form of intelligence may be briefly illustrated to advantage—I mean the lack of constructive imagination. This lack naturally goes along with the life of simple perception, of imitativeness, of concrete ideas, and of incapacity for abstract ideas, which the primitive man shows us.

The collection of implements and weapons arranged by Colonel Lane Fox, to show their relationships to common originals of the simplest types, suggests that primitive men are not to be credited with such inventiveness as even their simple appliances seem to indicate. These have arisen by small modifications ; and the selection of such modifications has led unobtrusively to various kinds of appliances, without any distinct devising of them.

Evidence of another kind, but of like meaning, is furnished by Sir Samuel Baker's paper on the "Races of the Nile Basin" (*Eth. Trans.*, 1867), in which he points out that the dwellings of the respective tribes are as constant in their types as are the nests of birds—each tribe of the one, like each species of the other, having a peculiarity. He also points out in this paper that the like permanent differences hold among their head-dresses ; and he further asserts of head-dresses, as of huts, that they have diverged from one another in their types in proportion as the languages have diverged. All which facts show us that in these races the thoughts, restrained within narrow established courses, have not the freedom required for entering into new combinations, and so initiating new modes of action and new forms of product.

Where we find ingenuity ascribed to inferior races, it is to races such as the Tahitians, Javans, etc., who have reached considerable degrees of civilization, who have considerable stocks of abstract words and ideas, who show

rational surprise and curiosity, and who thus evince higher intellectual development.

§ 48. Here we are brought naturally to a general truth allied to those with which, in the two foregoing chapters, I have precluded the summaries of results. I mean the truth that the primitive intellect, relatively simpler, develops more rapidly, and earlier reaches its limit.

In the *Principles of Psychology*, § 165, I have given testimonies concerning the Australians, the Negroes in the United States, the Negroes on the Nile, the Andamanese, the New Zealanders, the Sandwich Islanders, to the effect that the children among these races are quicker than European children in the acquisition of simple ideas, but presently stop short from inability to grasp the complex ideas readily grasped by European children, when they arrive at them. In further illustration I may add the remark of Mr. Reade, that in Equatorial Africa the children are "absurdly precocious;" the statement of Captain Burton, that the West Africans are "remarkably sharp when under puberty,—that epoch, as amongst the Hindus, seeming to addle their brains;" and the description of the Aleuts of Alaska, who "up to a certain point are readily taught" This early cessation of development—this change from an active receptivity while only simple ideas have to be taken in, to a slow receptivity when ideas of some generality have to be taken in, implies both low intellectual nature and a great impediment to intellectual advance; since it makes the larger part of life unmodifiable by further experiences. When we read that the East African "unites the incapacity of infancy with the unphancy of age"—when we find it alleged of the Australians that "after twenty their mental vigour seems to decline, and at the age of forty seems nearly extinct;" we cannot fail to see how greatly this arrest of mental evolution hinders improvement where improvement is most required

The intellectual traits of the uncivilized, thus made specially difficult to change, may now be recapitulated while observing that they are traits recurring in the children of the civilized.

Infancy and nursery-life, show us an absorption in sensations and perceptions, akin to that which characterizes the savage. In pulling to pieces its toys, in making mud-pies, in gazing at each new thing or person, the child exhibits a predominant perceptiveness with comparatively little reflectiveness.

There is, again, an obvious parallelism in the mimetic tendency. Children are ever dramatizing the lives of adults, and savages, along with their other mimeries, similarly dramatize the actions of their civilized visitors.

Want of power to discriminate between useless and useful facts, characterizes the juvenile mind, as it does the mind of the primitive man. Indeed, on observing how the facts learnt by a child, either as lessons or by spontaneous observation, are learnt for their own sakes only, without thought of their values as materials from which to generalize, it becomes manifest that this inability to select nutritive facts, is a necessary accompaniment of low development; since until generalization has made some progress, and the habit of generalizing has become established, there cannot be reached the conception that a fact has a remote value apart from any immediate value it may have.

Again, we see in the young of our own race a parallel inability to concentrate the attention on anything complex or abstract. The mind of the child, like that of the savage, soon wanders from sheer exhaustion when generalities and involved propositions have to be dealt with.

Necessarily, along with feebleness of the higher intellectual faculties, there goes, in both cases, an absence, or a paucity, of the ideas grasped by those faculties. The child, like the savage, has few words of even a low grade of abstractness, and none of a higher grade. For a long time it is familiar

with cat, dog, horse, cow, but has no conception of animal apart from kind, and years elapse before words ending in *ion* and *ity* occur in its vocabulary. Thus, in both cases, the very implements of developed thought are wanting.

Unsupplied as its mind is with general truths, and with the conception of natural order, the civilized child when quite young, like the savage throughout life, shows but little rational surprise or rational curiosity. Something startling to the senses—an unexpected flash or explosion—makes it stare vacantly, or perhaps cry; but show it a chemical experiment, or draw its attention to the behaviour of a gyroscope, and its interest is like that shown in a common-place new toy. After a time, indeed, when the higher intellectual powers it inherits from civilized ancestors are beginning to act, and when its stage of mental development represents that of such semi-civilized races as the Malayo-Polynesians, rational surprise and rational curiosity about causes, begin to show themselves. But even then its extreme credulity, like that of the savage, shows us the result of undeveloped ideas of causation and law. Any story, however monstrous, is believed; and any explanation, however absurd, is accepted as satisfactory. In the absence of generalized knowledge there is nothing with which the statement of an impossibility seems incongruous; so that criticism and scepticism are absent.

And here, in final elucidation of these intellectual traits of the primitive man, it may be pointed out respecting them, as respecting the emotional traits, that they could not be other than they are in the absence of the conditions brought about by social evolution. In the *Principles of Psychology*, §§ 484—493, it was shown in various ways that only as societies grow, become organized, and gain stability, do there arise those experiences by assimilating which the powers of thought develop. It needs but to ask what would happen to ourselves were the whole mass of existing knowledge obliterated, and were children with nothing

beyond their nursery-language left to grow up without guidance or instruction from adults, to perceive that even now the higher intellectual faculties would be almost inoperative, from lack of the materials and aids accumulated by past civilization. And seeing this, we cannot fail to see that development of the higher intellectual faculties has gone on *pari passu* with social advance, alike as cause and consequence ; that the primitive man could not possibly evolve these higher intellectual faculties in the absence of a fit environment ; and that in this, as in other respects, his progress was retarded by the absence of capacities which only progress could bring.

CHAPTER VIII.

PRIMITIVE IDEAS.

§ 49. YET a further preparation for interpreting social phenomena is needed. It is not enough that we should acquaint ourselves, first with the external factors, and then with those internal factors treated of in the foregoing three chapters, describing primitive man—physical, emotional, and intellectual. The behaviour of the social unit as exposed to environing conditions—inorganic, organic, and super-organic—depends in part on certain additional traits. For beyond those visible specialities of organization which the body displays, and beyond those hidden specialities of organization implied by the mental type, there are those kindred specialities, still less traceable, implied by the acquired beliefs. As the mental powers themselves are inherited products of accumulated experiences which moulded the nervous structures, so the ideas elaborated by those powers during individual life, are products of personal experiences to which there correspond certain minute modifications of the inherited structures. A complete account of the original social unit must include these—or rather, must include the correlative ideas implying them. For, manifestly, the ideas he forms of himself, of other beings, and of the surrounding world, greatly affect his conduct.

A true conception of these final modifications, or of the ideas which are their correlatives, is very difficult to form. Great obstacles stand in the way alike of inductive interpretation and deductive interpretation. We must first of all glance at these.

§ 50. To determine what conceptions are truly primitive, would be easy if we had accounts of truly primitive men. But there are sundry reasons for suspecting that existing men of the lowest types, forming social groups of the simplest kinds, do not exemplify men as they originally were. Probably most of them, if not all of them, had ancestors in higher states; and among their beliefs remain some which were evolved during those higher states. While the degradation-theory, as currently held, is untenable, the theory of progression, taken in its unqualified form, seems to me untenable also. If, on the one hand, the notion that savagery is caused by lapse from civilization, is irreconcilable with the evidence, there is, on the other hand, inadequate warrant for the notion that the lowest savagery has always been as low as it is now. It is quite possible, and, I believe, highly probable, that retrogression has been as frequent as progression.

Evolution is commonly conceived to imply in everything an *intrinsic* tendency to become something higher; but this is an erroneous conception of it. In all cases it is determined by the co-operation of inner and outer factors. This co-operation works changes until there is reached an equilibrium between the environing actions and the actions which the aggregate opposes to them—a complete equilibrium if the aggregate is without life, and a moving equilibrium if the aggregate is living. Thereupon evolution, continuing to show itself only in the progressing integration that ends in rigidity, practically ceases. If in the case of the living aggregates forming a species, the environing actions remain constant from generation to generation, the

species remains constant. If the environing actions change, the species changes until it re-equilibrates itself with them. But it by no means follows that this change in the species constitutes a step in evolution. Usually neither advance nor recession results; and often, certain previously-acquired structures being rendered superfluous, there results a simpler form. Only now and then does the environing change initiate in the organism a new complication, and so produce a somewhat higher type. Hence the truth that while for immeasurable periods some types have neither advanced nor receded, and while in other types there has been further evolution, there are many types in which retrogression has happened. I do not refer merely to such facts as that the tetrabranchiate Cephalopods, once multitudinous in their kinds and some of them very large, have now dwindled to a single medium-sized representative; or to such facts as that the highest orders of reptiles, the *Pterosauria* and *Dinosauria*, which once had many genera superior in structure and gigantic in size, have become extinct, while lower orders of reptiles have survived; or to such facts as that in many genera of mammals there once existed species larger than any of their allies existing now, but I refer more especially to the fact that among parasitic creatures, we have almost innumerable kinds which are degraded modifications of higher kinds. Of all existing species of animals, if we include parasites, the greater number have retrograded from a structure to which their remote ancestors had once advanced. Often, indeed, progression in some types involves retrogression in others. For always the more evolved type, conquering by the aid of its acquired superiority, tends to drive competing types into inferior habitats and less profitable modes of life, usually implying some disuse and decay of their higher powers.

As with organic evolution, so with super-organic evolution. Though, taking the entire assemblage of societies, evolution may be held inevitable as an ultimate effect of

the co-operating factors, intrinsic and extrinsic, acting on them all through indefinite periods of time; yet it cannot be held inevitable in each particular society, or even probable. A social organism, like an individual organism, undergoes modifications until it comes into equilibrium with environing conditions; and thereupon continues without further change of structure. When the conditions are changed meteorologically, or geologically, or by alterations in the Flora and Fauna, or by migration consequent on pressure of population, or by flight before usurping races, some change of social structure is entailed. But this change does not necessarily imply advance. Often it is towards neither a higher nor a lower structure. Where the habitat entails modes of life that are inferior, some degradation results. Only occasionally is the new combination of factors such as to cause a change constituting a step in social evolution, and initiating a social type which spreads and supplants inferior social types. For with these super-organic aggregates, as with the organic aggregates, progression in some produces retrogression in others. the more-evolved societies drive the less-evolved societies into unfavourable habitats; and so entail on them decrease of size, or decay of structure.

Direct evidence forces this conclusion upon us. Lapse from higher civilization to lower civilization, made familiar during school-days, is further exemplified as our knowledge widens. Egyptians, Babylonians, Assyrians, Phœnicians, Persians, Jews, Greeks, Romans—it needs but to name these to be reminded that many large and highly-evolved societies have either disappeared, or have dwindled to barbarous hordes, or have been long passing through slow decay. Ruins show us that in Java there existed in the past a more-developed society than exists now; and the like is shown by ruins in Cambodia. Peru and Mexico were once the seats of societies large and elaborately organized, that have been disorganized by conquest; and where the

cities of Central America once contained great populations carrying on various industries and arts, there are now but scattered tribes of savages. Unquestionably, causes like those which produced these retrogressions, have been at work during the whole period of human existence. Always there have been cosmical and terrestrial changes going on, which, bettering some habitats, have made others worse ; always there have been over-populations, spreadings of tribes, conflicts with other tribes, and escape of the defeated into localities unfit for such advanced social life as they had reached ; always, where evolution has been uninterfered with externally, there have been those decays and dissolutions which complete the cycles of social changes. That supplanting of race by race, and thrusting into corners such inferior races as are not exterminated, which is now going on so actively, and which has been going on from the earliest recorded times, must have been ever going on. And the implication is that remnants of inferior races, taking refuge in inclement, barren, or otherwise unfit regions, have retrograded.

Thus, then, the tribes now known as lowest must exhibit some social phenomena which are due, not to causes now operating, but to causes that operated during past social states higher than the present. This *à priori* conclusion harmonizes with the facts ; and, indeed, is suggested by facts that are otherwise inexplicable. Take, for example, some furnished by the Australians. Divided into tribes wandering over a wide area, these savages have, notwithstanding their antagonisms, a complex system of relationships, and consequent interdicts on marriage, which could not possibly have been framed by any agreement among them as they now exist ; but which are comprehensible as having survived from a state in which these tribes were more closely united, and subordinate to some common rule. Such, also, is the implication of the circumcision, and the knocking-out of teeth, which we find among them, as

among other races now in the lowest stages. For when we come hereafter to deal with bodily mutilations, we shall see that they all imply a subordination, political, or ecclesiastical, or both, such as these races do not now exhibit.

Hence, then, a difficulty in ascertaining inductively what are primitive ideas. Of the ideas current among men now forming each of the most rudimentary societies, there are doubtless some which have descended by tradition from a higher state. These have to be discriminated from truly primitive ideas; so that simple induction does not suffice.

§ 51. To the deductive method there are obstacles of another kind but equally great. Comprehension of the thoughts generated in the primitive man by his converse with the surrounding world, can be had only by looking at the surrounding world from his stand-point. The accumulated knowledge and the mental habits slowly acquired during education, must be suppressed, and we must divest ourselves of conceptions which, partly by inheritance and partly by individual culture, have been rendered necessary. None can do this completely, and few can do it even partially.

It needs but to observe what unfit methods are adopted by educators, to be convinced that even among the disciplined the power to frame thoughts which are widely unlike their own, is extremely small. When we see the juvenile mind plied with generalities while it has yet none of the concrete facts to which they refer—when we see mathematics introduced under the purely rational form, instead of under that empirical form with which it should be commenced by the child, as it was commenced by the race—when we see a subject so abstract as grammar put among the first instead of among the last, and see it taught analytically instead of synthetically; we have ample evidence of the prevailing inability to conceive the ideas of undeveloped minds. And if, though they have been children

themselves, men find it hard to re-think the thoughts of the child, still harder must they find it to re-think the thoughts of the savage. To keep out automorphic interpretations is beyond our power. To look at things with the eyes of absolute ignorance, and observe how their attributes and actions originally grouped themselves in the mind, implies a self-suppression that is impracticable.

Nevertheless, we must here do our best to conceive the surrounding world as it appeared to the primitive man, that we may be able the better to interpret deductively the evidence available for induction. And though we are incapable of reaching the conception by a direct process, we may make some approach to it by an indirect process. Guided by the doctrine of evolution in general, and by the more special doctrine of mental evolution, we may help ourselves to delineate primitive ideas in some of their leading traits. Having observed, *a priori*, what must be the characters of those ideas, we shall be as far as possible prepared to realize them in imagination, and then to discern them as actually existing.

§ 52. We must set out with the postulate that primitive ideas are natural, and, under the conditions in which they occur, rational. In early life we have been taught that human nature is everywhere the same. Led thus to contemplate the beliefs of savages as beliefs entertained by minds like our own, we marvel at their strangeness, and ascribe perversity to those who hold them. Casting aside this error, we must substitute for it the truth that the laws of thought are everywhere the same; and that, given the data as known to him, the inference drawn by the primitive man is the reasonable inference.

From its lowest to its highest grades, intelligence proceeds by the classing of objects and the classing of relations; which are, in fact, different aspects of the same process. (*Principles of Psychology*, §§ 309—316, § 381.) On the

one hand, perception of an object implies that its attributes are severally classed with like before-known attributes, and the relations in which they stand to one another with like before-known relations, while the object itself, in being known, is classed with its like as such or such. On the other hand, every step in reasoning implies that the object of which anything is predicated, is classed with objects previously known of like kind; implies that the attribute, power, or act, predicated, is classed as like other previously-known attributes, powers, or acts, and implies that the relation between the object and this predicated attribute, power, or act, is classed with previously-known like relations. This assimilation of states of consciousness of all orders with their likes in past experience, which is the universal intellectual process, animal and human, leads to results that are correct in proportion to the power of appreciating likenesses and unlikenesses. Where simple terms stand in relations that are simple, direct, and close, the classing can be correctly carried on by simple minds, but in proportion as the terms are complex and the relations between them involved, indirect, remote, the classing can be correctly carried on only by minds developed to a corresponding complexity. In the absence of this corresponding complexity the terms of relations are grouped with those which they conspicuously resemble, and the relations themselves are grouped in like manner. But this leads to error; since the most obvious traits are not always those by which things are really allied to one another, and the most obvious traits of relations are not always their essential traits.

Let us observe the great mistakes thus caused among our uncultured kindred; and then pass to the greater mistakes made by savages, still more ignorant and lower in faculty. In old works on natural history, whales are called fishes: living in the water, and fish-like in shape, what else should they be? Nine out of ten cabin-passengers, and ninety-nine out of a hundred of those in the steerage, would

be amazed were you to tell them that the porpoises playing about the steamer's bow, are nearer akin to dogs than to cod. Take, again, the name shell-fish, as popularly used. In the first place, there is supposed to be some alliance between shell-fish and fish proper, because both are aquatic; and in the second place, the fishmonger includes under shell-fish both oysters and crabs—these, though really far more remote in type than an eel is from a man, having in common the character that their softer parts are inclosed in hard cases.

After reminding ourselves of these mistakes to which classing by obvious characters leads our own people, we shall see how natural are the mistakes into which uncivilized men are similarly led. Hayes could not make the Esquimaux understand that woollen clothing was not a skin. "Glass" they "took for ice, and biscuit for the dried flesh of the musk-ox." Having so small an acquaintance with things, these were the most rational groupings they could make—quite as rational as those above instanced. If his erroneous classing led the Esquimaux to the erroneous inference that glass would melt in his mouth, it was no more erroneous than that of the ship-passenger who, instead of what he looked for, would find in the porpoise hot blood, and lungs to breathe air with. So, too, remembering that they had no experiences of metals, we shall see nothing irrational in the question put to Jackson by the Fijians—"how we could get axes hard enough in a *natural country*, to cut down the trees which the barrels of muskets were made of." For were not tubular canes the only objects to which musket barrels bore any resemblance? When, again, certain Hill-tribes with whom Dr. Hooker came in contact, saw thrown on the ground a spring-box measuring-tape, that had just been extended for use, and when, seeing the coils of tape disappearing into the box they ran away shrieking, it is manifest that the tape was considered in virtue of its spontaneous movement as something alive, and in virtue of its shape and behaviour as

some kind of snake. Without knowledge of mechanical contrivances, and seeing nothing of the internal spring, this belief was perfectly natural—any other would have been irrational.

Turn, now, from the classing of objects to the classing of relations. We may again help ourselves by analyzing a few errors current in our own society. It is a common recommendation of some remedy for a burn, that it "draws the fire out" the implication being that between the thing applied and the heat supposed to be lodged in the tissues, there is a connection like that between some object and another which it pulls. Again, after a frost, when air highly charged with water comes in contact with a cold smooth surface, such as that of a painted wall, the water condensed on it collects in drops and trickles down; whereupon may sometimes be heard the remark that "the wall sweats." Because the water, not visibly brought from elsewhere, makes its appearance on the wall as perspiration does on the skin, it is assumed to come out of the wall as perspiration does out of the skin. Here, as before, we see a relation classed with another which it superficially resembles, but from which it is entirely alien. If, remembering such cases, we consider what must happen where ignorance is still greater, we shall no longer be astonished at primitive interpretations. The Orinoco Indians think that dew is "the spittle of the stars." Observe the genesis of this belief. Dew is a clear liquid to which saliva has some resemblance. It is a liquid which, by its position on leaves, etc., seems to have descended from above, as saliva descends from the mouth of one who spits. Having thus descended during a cloudless night, it must have descended from the only things then visible above; namely, the stars. Thus the product itself, dew, and the relation between it and its supposed source, are respectively assimilated with those resembling them in obvious characters; and we need but recall our own common expression "it spits with rain," to see how natural is the interpretation.

Another trait of savage conceptions becomes comprehensible on observing what happens when complex objects and relations are thought of in the same manner as simple ones. Only as knowledge advances and observation becomes deliberate and critical, does there grow up the perception that the power of any agent to produce its peculiar effect, may depend on some one property to the exclusion of the rest, or on some one part to the exclusion of the rest, or not on any one of the properties or parts but on the combination of them. What character it is in a complex whole which determines its efficiency, can be known only after analysis has advanced somewhat, and until then, the efficiency is necessarily conceived as belonging to the whole indiscriminately. Further, this unanalyzed whole is conceived as standing towards some unanalyzed effect, in some relation that is unanalyzed. This trait of primitive thought is so important a one as determining the characters of primitive conceptions, that we must consider it more closely.

Let us symbolize the several attributes of an object, say a sea-shell, by A, B, C, D, E , etc., and the relations among them by w, x, y, z . The ability of this object to produce the particular effect of concentrating sound on the ear, is due in part to the smoothness of its internal surface (which we will express by C), and in part to those relations among the portions of this surface constituting its shape (which we will symbolize by y). Now, that the power of the shell to concentrate sound may be understood as thus resulting, it is needful that C and y should be separated in the thought from the rest. Until this can be done, the sound-multiplying power of the shell cannot be known not to depend on its colour, or hardness, or roughness (supposing these to be separately thinkable as attributes.) Evidently, before attributes are distinguished, this power of the shell can be known only as belonging to it generally—residing in it as a whole. But, as we have seen, (§ 43), attributes or properties, as we understand them, are

not recognizable by the savage—are abstractions which neither his faculties can grasp nor his language express. Thus, of necessity, he associates this peculiar power with the shell bodily—regards it as related to the shell as weight is related to a stone—conceives it as inhering in every part of the shell.

Hence certain beliefs, everywhere conspicuous among the uncivilized. A special potency which some object or part of an object displays, belongs to it in such wise that may be secured by consuming or possessing this object or part. For example, the powers of a conquered antagonist are supposed to be gained by devouring him. the Dakotah eats the heart of a slain foe to increase his own courage; the New Zealander swallows his dead enemy's eyes that he may see the further, the Abipone consumes tiger's flesh, thinking so to gain the tiger's strength and valour. The like trait is seen in such beliefs as that prevailing among the Guaranis, whose "pregnant women abstained from eating the flesh of the Anta, lest the child should have a large nose; and from small birds, lest it should prove diminutive," or again, in such beliefs as that which led the Caribs to sprinkle a male infant with its father's blood to give him his father's courage; or again, in such beliefs as that of the Timmanese and Bulloms, who hold that possessing part of a successful person's body gives them "a portion of his good fortune." Clearly the mode of thought thus exhibited, displayed even in the medical prescriptions of past ages, and continuing to recent days in the notion that character is absorbed with mother's milk, is a mode of thought necessarily persisting until analysis has disclosed the complexities of causal relations.

While physical conceptions are absent or remain very vague, any antecedent will serve to account for any consequent. Ask the quarryman what he thinks of the fossils his pick-axe is exposing, and he will tell you they are "sports of nature:" the tendency of his thought to pass from the existence of the fossils as an effect, to some pro-

ducing agent, is satisfied, and his curiosity ceases. The plumber, cross-examined about the working of the pump he is repairing, says that the water rises in it by suction. Having classed the process with that which he can perform by the muscular action of his own mouth applied to a tube, he thinks he understands it—never asks what force makes the water rise towards his mouth when he performs these muscular actions. Similarly with an explanation of some unfamiliar fact which you may often hear in cultivated society—"it is caused by electricity." The mental tension is sufficiently relieved when to the observed result there is joined in thought this something with a name; though there is no notion what the something really is, nor the remotest idea how the result can be wrought by it. Thus recognizing, even among ourselves, a readiness to accept any alleged relation between an action and a power, provided it is not directly contradicted by familiar experiences, we shall have no difficulty in seeing how the savage, with fewer experiences more vaguely grouped, adopts, as quite adequate, the first explanation which familiar associations suggest; and thereupon thinks no further. If Siberian tribes, finding mammoths imbedded in ice and the bones of mammoths in the ground, ascribe earthquakes to the burrowing of these huge beasts; or if savages living near volcanoes, think of them as fires lighted by some of their ancestors to cook by; they do but illustrate in a more marked way, the common readiness to fill up the missing term of a causal relation by the first agency which occurs to the mind. Further, it is observable that, besides this easy acceptance of any explanation suggested by familiar experiences, there is a complete contentment with the proximate explanation—there is no tendency to ask for anything beyond it. Thus the Africans who denied the alleged obligations to God, by saying that "the earth, and not God, gave them gold, which was dug out of its bowels: that the earth yielded them maize and rice; * * * that for fruits they were

obliged to the Portuguese, who had planted the trees ;” and so on ; show us clearly that a relation between the last consequent and its immediate antecedent having been established in thought, nothing further happens. There is not enough mental excursiveness to raise a question respecting any remoter antecedent.

One other trait, consequent on the foregoing traits, must be added. In proportion as complex objects and relations are conceived in terms of simple ones which they superficially resemble, there must result conceptions that are inconsistent and confused. The intellectual jumble which among ourselves unites the belief that epidemics are caused by unfavourable conditions, with the belief that they result from divine vengeance, must, among primitive men, unite beliefs still more incongruous. That their beliefs do exhibit extreme incongruities, is commonly remarked by travellers. Certain fundamental ideas as found among the Iroquois, are described by Morgan as “vague and diversified,” as found among the Creeks, are characterized by Schoolcraft as “confused and irregular ;” as found among the Karens, are said by Mason to be “confused, indefinite, and contradictory.” Everywhere occur gross inconsistencies which arise from leaving propositions uncomparated ; as when “in almost the same breath, a Malagasy will express his belief that when he dies he ceases altogether to exist, * * * and yet confess the fact that he is in the habit of praying to his ancestors”—a special inconsistency occurring among many peoples. How illogicalities so extreme are possible, we shall the more easily see on recalling certain of our own illogicalities. Instance the popular notion that killing a mad dog preserves from harm a person just bitten by it ; or instance that familiar absurdity fallen into by believers in ghosts, who, admitting that ghosts are seen clothed, admit, by implication, that coats have ghosts—an implication they had not perceived. Among men of low type, then, far more ignorant and with less capacity for thought,

we must expect to find a chaos of notions, and a ready acceptance of doctrines which to us seem monstrous.

And now we have prepared ourselves, so far as may be, for understanding primitive ideas. We have seen that a true interpretation of these must be one which recognizes their naturalness under the conditions. The mind of the savage, like the mind of the civilized, proceeds by classing objects and relations with their likes in past experience. Classing them rightly, implies a faculty complex enough to grasp in thought the groups of attributes characterizing them, and to grasp in thought the resulting modes of their action. In the absence of adequate mental power, there result simple and vague classings of objects by conspicuous likenesses, and of actions by conspicuous likenesses, and hence come crude notions, too simple and too few in their kinds to represent the facts. Further, these crude notions are inevitably inconsistent to an extreme degree. Let us now glance at the sets of ideas thus formed and thus characterized.

§ 53. In the sky, clear a few moments ago, the savage sees a fragment of cloud which grows while he gazes. At another time, watching one of these moving masses, he observes shreds of it drift away and vanish; and presently the whole disappears. What thought results in him? He knows nothing about precipitation and dissolution of vapour; nor has there been any one to stop his inquiry by the reply—"It is only a cloud." The essential fact forced on his attention is that something he could not before see has become visible, and something just now visible has vanished. The whence, and the where, and the why, he cannot tell; but there is the fact.

In this same space above him occur other changes. As day declines bright points here and there show themselves, becoming clearer and more numerous as darkness increases; and then at dawn they fade gradually, until not one is left. Differing from clouds utterly in size, form, colour, etc.;

differing also as continually re-appearing in something like the same places, in the same relative positions, and in moving but very slowly always in the same way, they are yet like them in becoming now visible and now invisible. That feeble lights may be wholly obscured by a bright light, and that the stars are shining during the day though he does not see them, are facts beyond the imagination of the savage. The truth, as he perceives it, is that these existences now show themselves and now are hidden.

Differing greatly from clouds and stars in their behaviour as the Sun and Moon do, they show, in common with them, this same alternation of visibility with invisibility. The Sun rises on the other side of the mountains, from time to time going behind a cloud presently comes out again; and at length hides below the level of the sea. The Moon, besides doing the like, first increases slowly night after night, and then wanes. by and by re-appearing as a thin bright streak, with the rest of her disc so faintly perceptible as to seem only half existing.

Added to these commonest and most regular occultations and manifestations, are various others, even more striking—comets, meteors, and the aurora with its arch and pulsating streams; flashes of lightning, rainbows, halos. Differing from the rest and from one another as these do, they similarly appear and disappear. So that by a being absolutely ignorant but able to remember, and to group the things he remembers, the heavens must be regarded as a scene of arrivals and departures of many kinds of existences; some gradual, some sudden, but alike in this, that it is impossible to say whence the existences come or whither they go.

Not the sky only, but also the Earth's surface, supplies various instances of these disappearances of things which have unaccountably appeared. Now the savage sees little pools of water formed by the rain drops coming from a source he cannot reach; and now, in a few hours, the gathered liquid has made itself invisible. Here, again, is

a fog; perhaps lying isolated in the hollows, perhaps enwrapping everything, which came a while since and presently goes without leaving a trace of its whereabouts. Afar off is perceived water—obviously a great lake; but on approaching it the seeming lake recedes, and cannot be found. In the desert, what we know as sand-whirlwinds, and on the sea what we know as water-spouts, are to the primitive man moving things which appear and then vanish. Looking out over the ocean he recognizes an island known to be a long way off, and commonly invisible, but which has now risen out of the water; and to-morrow, just above the horizon, he observes an inverted figure of a boat, perhaps by itself, or perhaps joined to an erect figure above. In one place he sometimes perceives land-objects on the surface of the sea, or in the air over it—*a fata morgana*; and in another, over against him on the mist, there occasionally comes into view a gigantic duplicate of himself—“a brocken spectre.” These occurrences, some familiar and some unfamiliar, repeat the same experience—show transitions between the visible and the invisible.

Once more, let us ask what must be the original conception of wind. Consider the facts apart from hypothesis, and the implication which every breeze or gust carries with it, is that of a power neither visible nor tangible. Nothing in early experiences yields the idea of air, as we are now familiar with it; and, indeed, probably most can recall the difficulty they once had in thinking of the surrounding medium as a material substance. The primitive man cannot regard it as a something which acts as do the things he • sees and handles. Into this seemingly-empty space around, there from time to time comes an invisible agent which bends the trees, drives along the leaves, disturbs the water; and which he feels moving his hair, fanning his cheek, and now and then pushing his body with a force he has some difficulty in overcoming. What may be the nature of this agent there is nothing to tell him; but one thing is irre-

sistibly thrust on his consciousness—that sounds can be made, things about him can be moved, and he himself can be buffeted, by an existence he can neither grasp nor see.

What primitive ideas arise out of these experiences derived from the inorganic world? In the absence of hypothesis (which is foreign to thought in its earliest stages), what mental association do these multitudinous occurrences, some at long intervals, some daily, some hourly, some from minute to minute, tend to establish? They present, under many forms, the relation between a perceptible and an imperceptible mode of existence. In what way does the savage think of this relation? He cannot think of it in terms of dissipation into vapour and condensation from it, nor in terms of optical relations producing illusions, nor in any terms of physical science. How, then, does he formulate it? A clue to the answer will be furnished by recalling certain remarks of young children. When an image from the magic lantern thrown on a screen, suddenly disappears on withdrawal of the slide, or when the reflection from a looking-glass, cast for a child's amusement on the wall or ceiling, is made to vanish by changing the attitude of the glass, the child asks—"Where is it gone to?" The notion arising in its mind is, not that this something no longer seen has become non-existent, but that it has become non-apparent; and it is led to think this by daily observing persons disappear behind adjacent objects, by seeing things put away out of sight, and by now and again finding a toy that had been hidden or lost. Similarly, the primitive idea is, that these various existences now manifest themselves and now conceal themselves. As the animal which he has wounded hides itself in the brushwood, and, if it cannot be found, is supposed by the savage to have escaped in some incomprehensible way, but to be still existing; so, in the absence of accumulated and organized knowledge, the implication of all these experiences is, that many of the things above and around pass often from visibility to invisibility,

and conversely. Bearing in mind how the actions of wind prove that there is an invisible form of existence which manifests power, we shall see this belief to be plausible.

It remains only to be pointed out that along with this conception of a visible condition and an invisible condition, which each of these many things has, there comes the conception of duality. Each of them is in a sense double; since it has these two complementary modes of being.

§ 54. Significant facts of another order, from time to time disclosed, may next be noted—facts irresistibly impressing the primitive man with the belief that things are transmutable from one kind of substance to another. I refer to the facts forced on his attention by imbedded remains of animals and plants.

While gathering food on the sea-shore, he finds, protruding from a rock, a shell which, if not of the same shape as the shells he picks up, is so similar that he naturally classes it with them. But instead of being loose, it is part of a solid block; and on breaking it off, he finds its inside as hard as its matrix. Here, then, are two kindred forms, one of which consists of shell and flesh, and the other of shell and stone. Near at hand, in the mass of clay *débris* detached from the adjacent cliff, he picks up a fossil ammonite. Perhaps, like the *Gyphœa* just examined, it has a shelly coating with a stony inside. Perhaps, as happens with some liassic ammonites of which the shell has been dissolved away, leaving the masses of indurated clay that filled its chambers locked loosely together, it suggests a series of articulated vertebræ coiled up; or, as with other liassic ammonites of which the shell has been replaced by iron pyrites, it has a glistening appearance like that of a snake's skin. As such fossils are sometimes called "snake-stones," and are in Ireland supposed to be the serpents St. Patrick banished, we cannot wonder if the uncritical savage, classing this object with those it most resembles, thinks it a

transmuted snake—once flesh and now stone. In another place, where a gully has been cut through sandstone by a stream, he observes on the surface of a slab the outline of a fish, and, looking closely, sees scales and the traces of fins and elsewhere, similarly imbedded in rock, he finds skulls and bones not unlike those of the animals he kills for food : some of them, indeed, not unlike those of men.

Still more striking are the transmutations of plants occasionally discovered. I do not refer so much to the prints of leaves in shale, and the fossil stems found in strata accompanying coal : I refer, more especially, to the silicified trees here and there met with. Retaining, not their general forms only but their minute structures, so that the annual growths are marked by rings of colour such as mark them in living stems, these yield the savage clear evidence of transmutation. With all our knowledge it remains difficult to understand how silica can so replace the components of the wood as to preserve the appearance thus perfectly ; and for the primitive man, knowing nothing of molecular action and unable to conceive a process of substitution, there is no possible thought but that the wood is changed into stone.*

Thus, if we ignore those conceptions of physical causation which have arisen only as experiences have been slowly organized during civilization, we shall see that in their absence there would be nothing to prevent us from putting on these facts the interpretations which the primitive man puts on them. Looking at the evidence through his eyes, we find his belief that things change from one kind of substance to another, to be the inevitable belief.

* Let me here give an instance of the way in which facts of this kind may affect men's beliefs. In his *Two Years in a Levantine Family*, Mr St John, commenting on the extreme credulity of the Egyptians, names, in illustration, a report which was spread and widely credited that certain villagers had been turned into stones. Belief of this report seems, to us, astonishing, but it seems less astonishing when all the circumstances are known. Not many miles from Cairo there exists an extensive silicified forest—stumps and prone trunks in great numbers. If trees can be turned into stone, why not men ? To the unscientific, one event looks just as likely as the other.

And here let us not omit to note that along with the notion of transmutation is involved the notion of duality. These things have obviously two states of existence.

§ 55. Much evidence forces on the primitive man the notion that things can change their forms as well as their substances. Did we not thoughtlessly assume that truths which culture has made obvious to us are naturally obvious, we should see that an unlimited belief in metamorphosis is one which the savage cannot avoid. From early childhood we hear remarks implying that certain transformations which living things undergo are matters of course, while other transformations are impossible. This distinction we suppose to have been manifest at the outset. But at the outset, the observed metamorphoses suggest that any metamorphosis may occur.

Consider the immense contrast in form as in substance between the seed and the plant. Look at this nut with hard brown shell and white kernel, and ask what basis there is for the expectation that from it will presently come a soft shoot and green leaves. When young we are told that the one *grows* into the other; and the blank form of explanation being thus filled up, we cease to wonder and inquire. Yet it needs but to consider what thought would have arisen had there been no one to give this mere verbal solution, to see that the thought would have been—transformation. Apart from hypothesis, the bare fact is that a thing having one size, shape, and colour, becomes a thing having an utterly different size, shape, and colour.

Similarly with the eggs of birds. But a few days since this nest contained four or five rounded, smooth, speckled bodies; and now in place of them are as many chicks gaping for food. We are brought up to the idea that the eggs have been *hatched*; and with this semblance of interpretation we are content. This extreme change in visible and tangible characters being recognized as one constantly

occurring in the order of nature, is therefore regarded as not remarkable. But to a mind occupied by no generalized experiences of its own or of others, there would seem nothing more strange in the production of chicks from nuts than in the production of chicks from eggs: a metamorphosis of the kind we think impossible, would stand on the same footing as one which familiarity has made us think natural. Indeed, on remembering that there still survives, or till lately survived, the popular belief that barnacle-geese arise from barnacles—on learning that even in the early Transactions of the Royal Society, there is a paper describing a barnacle as showing faint traces of the young bird it is about to produce; it will be seen that only by advanced science has there been discriminated the natural organic transformations, from transformations which to ignorance seem just as likely.

The insect-world yields instances of metamorphoses even more misleading. To a branch which shades the opening of his wigwam, the savage saw a few days ago, a caterpillar hanging with its head downwards. Now in the same place hangs a differently formed and coloured thing—a chrysalis. In a week or two after there comes out a butterfly: leaving a thin empty case. These insect-metamorphoses, as we call them, which we now interpret as processes of evolution presenting certain definitely-marked stages, are in the eyes of the primitive man, metamorphoses in the original sense. He accepts them as actual changes of one thing into another thing utterly different.

How readily the savage confounds these metamorphoses which really occur, with metamorphoses apparently like them but impossible, we shall perceive on considering a few cases of mimicry by insects, and the conclusions they lead to. Many caterpillars, beetles, moths, butterflies, simulate the objects by which they are commonly surrounded. The *Onychocerus scorpion* is so exactly like, "in colour and rugosity," to a piece of the bark of the

particular tree it frequents, "that until it moves it is absolutely invisible" thus raising the idea that a piece of the bark itself has become alive. Another beetle, *Onthophorus sulcatus*, is "like the seed of an umbelliferous plant;" another "undistinguishable by the eye from the dung of caterpillars," some of the *Cassidæ* "resemble glittering dew-drops upon the leaves;" and there is a weevil so coloured and formed that, on rolling itself up, it "becomes a mere oval brownish lump, which it is hopeless to look for among the similarly-coloured little stones and earth pellets among which it lies motionless," and out of which it emerges after its flight, as though a pebble had become animated. To these examples given by Mr. Wallace, may be added that of the "walking-stick insects," so called "from their singular resemblance to twigs and branches."

"Some of these are a foot long and as thick as one's finger, and their whole colouring, form, rugosity, and the arrangement of the head, legs, and antennæ, are such as to render them absolutely identical in appearance with dead sticks. They hang loosely about shrubs in the forest, and have the extraordinary habit of stretching out their legs unsymmetrically, so as to render the deception more complete."

What wonderful resemblances exist, and what illusions they may lead to, will be fully perceived by those who have seen, in Mr. Wallace's collection of butterflies, the Indian genus *Kallima*, placed amid the objects it simulates. Habitually settling on branches bearing dead leaves, and closing its wings, it then resembles a dead leaf, not only in general shape, colour, markings, but in so seating itself that the processes of the lower wings unite to form the representation of a foot-stalk. When it takes flight, the impression produced is that one of the leaves has changed into a butterfly. This impression is greatly strengthened when the creature is caught. On the under-side of the closed wings, is still clearly marked the mid-rib, running right across them from foot-stalk to apex; and here, too, are lateral veins. Nay, this is not all. Mr. Wallace says—

"We find representations of leaves in every stage of decay, various

blotched and mildewed and pierced with holes, and in many cases irregularly covered with powdery black dots gathered into patches and spots, so closely resembling the various kinds of minute fungi that grow on dead leaves that it is impossible to avoid thinking at first sight that the butterflies themselves have been attacked by real fungi."

On recalling the fact that, a few generations ago, all civilized people believed, as many civilized people believe still, that decaying meat is itself transformed into maggots—on being reminded that among our peasantry at the present time, the thread-like aquatic worm *Gordius*, is said to be horsehair that has fallen into the water and become living; we shall see it to be inevitable that these extreme resemblances should suggest the notion of actual metamorphoses. That this notion, so suggested, becomes a belief, is a proved fact. In Java and neighbouring regions inhabited by it, that marvellous insect, "the walking leaf," is positively asserted to be a leaf that has become animated. What else should it be? In the absence of that explanation of mimicry so happily hit upon by Mr. Bates, no natural origin for such wonderful likenesses between things wholly unallied can be imagined. And while there is no generalized knowledge, there is nothing to prevent acceptance of these apparent transformations as real transformations: indeed, apparent and real are not distinguished until criticism and scepticism have made some progress.

Once established, the belief in transformation extends itself without resistance to other classes of things. Between an egg and a young bird, there is a far greater contrast in appearance and structure than between one mammal and another. The tadpole, with a tail and no limbs, differs from a young frog with four limbs and no tail, more than a man differs from a hyæna; for both of these have four limbs, and both laugh. Evidently, then, the natural metamorphoses so abundant throughout nature, joined with these apparent metamorphoses which the primitive man inevitably confounds with them, originate the conception of meta-

morphoses in general; which rises into an explanation everywhere employed without check.

Here, again, we have to note that while initiating and fostering the notion that things of all kinds may suddenly change their forms, the experiences of transformations confirm the notion of duality. Each object is not only what it seems, but is potentially something else.

§ 56. What is a shadow? Familiar as mature life has made us with shadows, and almost automatic as has become the interpretation of them in terms of physical causation, we do not ask how they look to the absolutely ignorant.

Those from whose minds the thoughts of childhood have not wholly vanished, will remember the interest they once felt in watching their shadows—moving legs and arms and fingers, and observing how corresponding parts of the shadows moved. By a child a shadow is thought of as an entity. I do not assert this without evidence. A memorandum made in 1858-9, in elucidation of the ideas described in the just-published book of Williams on the Fijians, concerns a little girl of some seven, who did not know what a shadow was, and to whom I could give no conception of its true nature.

On ignoring acquired ideas, we shall see this difficulty to be quite natural. A thing having outlines, and differing from surrounding things in colour, and especially a thing which moves, is, in other cases, a reality. Why is not this a reality? The conception of it as merely a negation of light, is a conception not to be framed until after the behaviour of light is in some degree understood. It is true that the uncultured among ourselves, without clearly formulating the truth that light, proceeding in straight lines, necessarily leaves unlighted spaces behind opaque objects, nevertheless come to regard a shadow as naturally attending an object exposed to light, and as not being anything real. But this is one of the countless cases in which inquiry is set a-

rest by a verbal explanation. "It's only a shadow," is the answer given in early days; and this answer, repeatedly given, deadens wonder and stops further thought.

But the primitive man, with no one to answer his questions, and without ideas of physical causation, necessarily concludes a shadow to be an actual existence, which belongs in some way to the person casting it. He simply accepts the facts. Whenever the sun or moon is visible, he sees this attendant thing which rudely resembles him in shape, which moves when he moves, which now goes before him, now keeps by his side, now follows him, which lengthens and shortens as the ground inclines this way or that, and which distorts itself in strange ways as he passes by irregular surfaces. True, he cannot see it in cloudy weather, but, in the absence of a physical interpretation, this simply proves that his attendant something comes out only on bright days and bright nights. It is true, also, that such resemblance as his shadow bears to him, and its approximate separateness from him, are shown only when he stands up on crouching it becomes indefinitely formed, and as he lies down it seems to disappear and partially merge into him. But this observation confirms his impression of its reality. The greater or less separateness of his own shadow, reminds him of cases where a shadow is quite separate. When watching a fish in the water on a fine day, he sees a dark, fish-shaped patch on the bottom at a considerable distance from the fish, but nevertheless following it hither and thither. Lifting up his eyes, he observes dark patches moving along the mountain sides—patches which, whether traced or not to the clouds that cast them, are seen to be widely disconnected from objects. These facts show him that shadows, often so closely joined with their objects as to be hardly distinguishable from them, may become distinct and remote.

ⁱ Thus, by minds beginning to generalize, shadows must
one be conceived as existences appended to, but capable of

separation from, material things. And that they are so conceived is abundantly proved. We find it stated by Bastian of the Benin-negroes, that they regard men's shadows as their souls; and he also says of the Wanika that they are afraid of their own shadows. possibly thinking, as some other negroes do, that their shadows watch all their actions, and bear witness against them. Among the Greenlanders, according to Crantz, a man's shadow is one of his two souls—the one which goes away from his body at night. Among the Fijians, too, the shadow is called "the dark spirit," as distinguished from another which each man possesses. And the community of meaning, hereafter to be noted more fully, which various unallied languages betray between shade and spirit, shows us the same thing.

These illustrations of the truth that a shadow is originally regarded as an appended entity, suggest more than I here wish to show. The ideas of the uncivilized as we now find them, have developed from their first vague forms into forms having more coherence and definiteness. We must neglect the special characters of these ideas, and consider only that most general character with which they began. This proves to be the character we inferred above. Shadows are realities which, always intangible and often invisible, nevertheless severally belong to their visible and tangible correlatives; and the facts they present, furnish further materials both for the notion of apparent and unapparent states, and for the notion of a duality in things.

§ 57. Other phenomena, in some respects allied, yield these notions still more materials. I refer to reflections.

If the rude resemblance in outlines and movements which a shadow bears to the person casting it, raises the idea of a second entity, much more must the exact resemblance of a reflection do this. Repeating all the details of form, of light and shade, of colour, and mimicking even the grimaces of the original, this image cannot at first be inter-

preted otherwise than as an existence. Only by experiment is it ascertained that to the visual impressions there are not, in this case, those corresponding tactual impressions yielded by most other things. What results? Simply the notion of an existence which can be seen but not felt. Optical interpretation is impossible. That the image is formed by reflected rays, cannot be conceived while physical knowledge does not exist; and in the absence of authoritative statement that the reflection is a mere appearance, it is inevitably taken for a reality—a reality in some way belonging to the person whose traits it simulates and whose actions it mocks.

Moreover, these duplicates seen in the water, yield to the primitive man obvious verifications of certain other beliefs which surrounding things suggest. Deep down in the clear pool, are there not clouds like those he sees above? The clouds above appear and disappear. Has not the existence of these clouds below something to do with it? At night, again, seeming as though far underneath the surface of the water, are stars as bright as those overhead. Are there, then, two places for the stars? and did those which disappeared during the day go below where the rest are? Once more, overhanging the pool is this dead tree from which he breaks off branches for firewood. Is there not an image of it too? and the branch which he burns and which vanishes into nothing in burning—is there not some connection between its invisible state and that image of it in the water which he could not touch, any more than he can now touch the consumed branch?

That reflections thus generate a belief—confused and inconsistent it may be, but still, a belief—that each individual has a duplicate, usually unseen, but which may be seen on going to the water-side and looking in, is not an *à priori* inference only: there are facts verifying it. According to Williams, some Fijians “speak of man as having two spirits. His shadow is called ‘the dark spirit,’ which, they say, goes to Hades. The other is his likeness reflected

in water or a looking-glass, and is supposed to stay near the place in which a man dies." This belief in two spirits, is, indeed, the most consistent one. For are not a man's shadow and his reflection separate? and are they not co-existent with one another and with himself? Can he not, standing at the water-side, observe that the reflection in the water and the shadow on the shore, simultaneously move as he moves? Clearly, while both belong to him, the two are independent of him and of one another, for both may be absent together, and either may be present in the absence of the other.

Early theories about this duplicate are now beside the question, and must be ignored. We are concerned only with the fact that it is thought of as real. To the primitive mind, making first steps in the interpretation of the surrounding world, here is revealed another class of facts confirming the notion that existences have their visible and invisible states, and strengthening the implication of a duality in each existence.

§ 58. Let any one ask himself what would be his thought if, in a state of child-like ignorance, he were to pass some spot and to hear repeated a shout which he uttered. Would he not inevitably conclude that the answering shout came from another person? Succeeding shouts severally repeated with words and tones like his own, yet without visible source, would rouse the idea that this person was mocking him, and at the same time concealing himself. A futile search in the wood or under the cliff, would end in the conviction that the hiding person was very cunning. especially when joined to the fact that here, in the spot whence the answer before came, no answer was now given—obviously because it would disclose the mocker's whereabouts. If at this same place on subsequent occasions, this responsive shout from a source eluding search, always came to any passer-by who called out, the

resulting thought would be that in this place there dwelt one of these invisible forms—a man who had passed into an invisible state, or who could become invisible when sought.

Nothing approaching to the physical explanation of an echo can be framed by the uncivilized man. What does he know about the reflection of sound-waves?—what, indeed, is known about the reflection of sound-waves by the mass of our own people? Were it not that the spread of knowledge has modified the mode of thought throughout all classes, producing everywhere a readiness to accept what we call natural interpretations, and to assume that there are natural interpretations to occurrences not comprehended, there would even now be an explanation of echoes as caused by unseen beings.

That to the primitive mind they thus present themselves, is shown by facts. Southey, writing of the Abipones, says that “what became of the Lokal [spirit of the dead] they knew not, but they fear it, and believe that the echo was its voice” Concerning the Indians of Cumana (Central America), Herrera tells us that they “believed the soul to be immortal, that it did eat and drink in a plain where it resided, and that the echo was its answer to him that spoke or called” And, narrating his voyage down the Niger, Lander says that “from time to time, as we came to a turn in the creek, the captain of the canoe halloed to the fetish, and where an echo was returned, half-a-glass of rum, and a piece of yam and fish, were thrown into the water. When asked why, he said—‘Did you not hear the fetish?’”

Here, as before, I must ask the reader to ignore these special interpretations, acceptance of which forestalls the argument Attention is now drawn to this evidence simply as confirming the inference that, in the absence of physical explanation, an echo is conceived as the voice of some one who avoids being seen. So that once more we have duality implied—of an invisible as well as a visible state.

§ 59. To a mind unfurnished with any ideas save those of its own gathering, surrounding nature thus presents multitudinous cases of seemingly-arbitrary change—now slight and slow, now gradual and great, now sudden and extreme. In the sky and on the earth, things make their appearance and disappear; and there is nothing to show why they do so. Here on the surface and there deeply imbedded in the ground, are things that have been transmuted in substance—changed from flesh to stone, from wood to flint. Living bodies on all sides exemplify metamorphosis in ways marvellous enough to the instructed, and to the primitive man quite incomprehensible. And this protean character which so many things around him exhibit, and which familiarize him with the notion that there are two or more inter-changeable states of existence, is again impressed on him by such phenomena as shadows, reflections, and echoes.

Did we not thoughtlessly accept as innate, the conceptions slowly elaborated during civilization and acquired insensibly during our early days, we should at once see that these ideas which the primitive man forms, are inevitably formed. The laws of mental association necessitate these primitive notions of transmutation, of metamorphosis, of duality; and, until experiences have been systematized, no limits or restraints are known. With the eyes of developed knowledge we look at the snow as a particular form of crystallized water, and at hail as drops of rain which congealed as they fell. When these become fluid we say they have thawed—thinking of the change as a physical effect of heat; and, similarly, when the hoar frost, fringing the sprays turns into hanging drops, or when the surface of the pool solidifies and again liquifies. But looked at with the eyes of absolute ignorance, these are transmutations of substance—passings from one kind of existence into another kind of existence. And in like ways are necessarily concerned all the changes above enumerated.

Let us now ask what happens in the primitive mind when

there has been accumulated this heterogeneous assemblage of 'crude ideas, having, amid their differences, certain resemblances. In conformity with the law of evolution, every aggregate tends to integrate, and to differentiate while it integrates. The aggregate of primitive ideas must do this. After what manner will it do it? At the outset, these multitudinous vague notions form a loose mass without order. They slowly segregate, like cohering with like, and so forming indefinitely-marked groups. When these groups begin to form a consolidated whole, constituting a general conception of the way in which things at large go on, they must do it in the same way. such coherence of the groups as arises, must be due to some likeness among the members of all the groups. We have seen that there is such a likeness—this common trait of duality joined with this aptitude for passing from one mode of existence to another.

Integration must commence by the recognition of some conspicuous typical case. It is a truth perpetually illustrated, that accumulated facts lying in disorder, begin to assume some order if an hypothesis is thrown among them. When into a chaos of detached observations, is introduced an observation akin to them in which a causal relation is discernible, it forthwith commences assimilating to itself from this heap of observations, those which are congruous; and tends even to coerce into union those of which the congruity is not manifest. One may say that as the protoplasm forming an unfertilized germ, remains inert until the matter of a sperm-cell is joined with it, but begins to organize when this addition is made; so a loose aggregate of observations continues unsystematized in the absence of an hypothesis, but under the stimulus of an hypothesis undergoes changes bringing about a coherent systematic doctrine.

What particular example, then, of this prevalent duality, plays the part of an organizing principle to the aggregate of primitive ideas? We must not look for an hypothesis properly so called: an hypothesis

is an implement of inquiry not to be framed by the primitive mind. We must look for some experience in which this duality is forcibly thrust on the attention. As a consciously-held hypothesis is 'habitually based on some obtrusive instance of a relation, which other instances are suspected to be like; so the particular primitive notion which is to serve as an unconscious hypothesis, setting up organization in this aggregate of primitive notions, must be one conspicuously exemplifying their common trait.

First identifying this typical notion, we shall afterwards have to enter on a survey of the general conceptions which result. It will be needful to pursue various lines of inquiry and exposition not manifestly relevant to our subject, and it will also be needful to consider the meaning of much evidence furnished by men who have advanced beyond the savage state. But this discursive treatment is unavoidable. Until we can figure to ourselves with approximate truth the primitive system of thought, we cannot fully understand primitive conduct; and rightly to conceive the primitive system of thought, we must compare the systems found in many societies helping ourselves by observing its developed forms, to verify our conclusions respecting its undeveloped form *

* The reader who is surprised to find in the succeeding chapters so much space devoted to the genesis of those "superstitions," as we call them, which constitute the primitive man's Theory of Things, will get a clue on turning to the first part of the Essay on "Manneis and Fashion," originally published in 1854 (see *Essays, &c*, Vol I). The conception, there briefly indicated, of the way in which social organization is affected by his beliefs, I have been, since that date, slowly developing, and the following chapters present it in a complete form. Beyond publishing an article on "The Origin of Animal-Worship" in May, 1870, I have done nothing toward setting forth these developed views—other subjects having had prior claims. In the meantime the important works of Mr Tylor and Sir John Lubbock, have established, by abundant evidence, views in some respects like them. It will be seen, however, that, while coinciding in several of their special conclusions, I differ in respect to the order of genesis and mode of dependence of primitive superstitions.

CHAPTER IX.

THE IDEAS OF THE ANIMATE AND THE INANIMATE.

§ 60. At first sight, the difference between an animal and a plant seems greater than the difference between a plant and a lifeless object. Its frequent movements distinguish a quadruped or a bird from inert things; but a plant, inert in most respects, is not thus distinguished. Only to beings capable of making those comparisons between past and present by which growth is detected and the cycle of reproductive changes traced, can it become manifest that plants are allied with animals more than with the rest of things. The earliest classification, then, puts animals into one group and the rest of things into another.

Hence, in considering how there arises in consciousness the distinction between the living and the not-living, we may, for a while, neglect the phenomena of plant-life and consider only those of animal-life.

Fully to understand the nature of this distinction as conceived by the primitive man, we must observe the development of it through lower forms of consciousness.

§ 61 When wandering some sunny day on the sea-shore, among masses of rock covered with "acorn-shells," and occasionally standing still to examine something, a feeble hiss may be heard. On investigation, it will be found that this sound proceeds from the acorn-shells. During the absence of the tide they commonly remain with their valves

not quite shut, but those on which a shadow is suddenly cast begin to close, and by simultaneous closure of the great numbers covered by the shadow, this faint sound is produced. Here the fact to be observed is that these cirrhipeds, which are transformed crustaceans having aborted eyes imbedded in their bodies, and vision which suffices only to discriminate light from darkness, draw to the doors of their cells when there is a sudden obscuration. Ordinarily, something alive casts the shadow—there is an adjacent source of danger. But as the shadow may be cast by a sharp-edged cloud, which obscures the sun with adequate suddenness, an adjacent living body is frequently not the cause: the test is a very imperfect one. Still, we see that deep down among creatures thus unintelligent, there is a vague general response to an indication of adjacent life: the indication being a change that implies a moving body.

Various inferior types whose lives are carried on by reflex actions only, display no very marked advance on this mode of discriminating the living from the not-living, as visually presented. Further along the shore, in the tide-pools, are shrimps, which suddenly dart hither and thither when a large body comes near, and when decaying sea-weed is disturbed, the sea-fleas jump, whatever may have caused the disturbance. So in the neighbouring fields, the insects, not distinguishing the shapes of moving objects or their kinds of motion, fly or leap when sudden great changes of visual impression are made on them—each such change usually implying a living body near at hand. In these cases, as in the cases of caterpillars that roll themselves up when touched, the action is automatic. After the vivid nervous stimulus there comes the strong motor discharge, resulting in flight or in a convulsive contraction of the muscles.

Speaking generally, we may say that in such cases the motion which implies life is confounded with the motion which does not. The kind of mental act is like that occurring in ourselves when some large object suddenly passes

close in front. An involuntary start results, before there is time to decide whether the object is alive or dead, a source of danger or not. Here the primary suggestion with us, as with these lower creatures, is that the *motion* implies life; but whereas with us conscious observation instantly disproves or verifies this suggestion, with them it does not.

§ 62. What is the first specialization of this primary consciousness? How do superior creatures begin to qualify this association between motion and life, in such way as to exclude from the class of living things a number which move but are not living? Where intelligence rises beyond the merely automatic, the motion implying life begins to be distinguished from other motion by its *spontaneity*. Without being struck or pushed by anything external, bodies which are alive suddenly change from rest to movement, or from movement to rest. Rooks watching doubtfully as you pass in the distance, rise into the air if you stop; or, not doing this, do it when you walk on, or even when, without changing place, you move your arms.

That the spontaneity of the motion serves as a test, is clearly shown by the behaviour of tame animals, and even of wild animals, in presence of a railway train. In the early days of railways they showed great alarm; but after a time, familiarized with the roar and the swift motion of this something which, appearing in the distance rushed by and disappeared in the distance, they became regardless of it: the cattle now continue to graze, and even the partridges on the embankment-slope scarcely raise their heads.

Converse evidence is yielded by the behaviour of a dog mentioned by Mr. Darwin. Like others of his kind, and like superior animals generally, he was regardless of the swaying flowers and the leaves occasionally rustled by the summer breeze. But there happened to be on the lawn an opened parasol. From time to time the breeze stirred this; and when it did so, the dog growled fiercely and

barked. Conscious, as his experiences had long ago made him, that the familiar agency which he felt raising his own hair, sufficed also to move the leaves about, and that consequently their motion was not self-produced, he had not observed so large a thing as a parasol thus moved. Hence arose the idea of some living power—an intruder.

Again, appearances which at first vividly suggest life, are presently classed as not alive if spontaneity is absent. The behaviour of a dog before a looking-glass proves this. At first conceiving the reflected image to be another dog, he is excited; and if the back of the looking-glass is accessible, makes attempts to reach the supposed stranger. When, however, the glass is so placed, say in a chiffonier, as to show him the image very frequently, he becomes indifferent to it. For what reason? The appearance does not spontaneously move. While he is still, it remains still, and any motion in it follows motion in himself.

§ 63. Yet a further test used by intelligent animals to discriminate the living from the not-living, is the *adaptation* of motion to ends. Amusing herself with a mouse she has caught, the cat, if it remains long stationary, touches it with her paw to make it run. Obviously the thought is that a living thing disturbed will try to escape, and so bring a renewal of the chase. Not only is it expected that there will be motion which is spontaneous, in the sense that it is self-produced; but it is expected that this motion will be away from danger. Habitually it is observable of animals that when failing to decide by the odour whether something smelt at is a living creature or not, there is an anticipation that disturbance will cause it to run away if it is alive. And even the behaviour of some gregarious birds when one of their number has been shot, shows that the absence of response to the cries and movements of the flock, leads to the impression that their companion is no longer one of that class of objects known as animated.

§ 64. Thus, ascending from low to high types of creatures, we see that the power of distinguishing the animate from the inanimate increases. At first extremely vague, the discriminations become gradually more definite, at first very general, they become more special, and the consequent classings become less frequently erroneous. First *motion*, then *spontaneous motion*, then *adapted spontaneous motion*, are the successive tests used as intelligence progresses.

Doubtless other traits aid. Sniffing the air, a deer perceives by something in it the proximity of an enemy; and a carnivore often follows prey by the scent it has left. But odours, though concomitants of life in certain adjacent objects, are not used as tests of life, for when found, an object from which an odour proceeds is not regarded as living if it exhibits none of the expected motions. Sounds, too, serve as indications, but these, when caused by animals, are the results of spontaneous motions, and are taken to imply life only because they accompany other spontaneous motions.

It should be added that the ability thus to class with approximate correctness the animate and the inanimate, is inevitably developed in the course of evolution; since it is an essential means to self-preservation. Under penalties of death by starvation or destruction, there has been a constant cultivation of the power to discriminate the two, and a consequent increase of it.

§ 65. Shall we say that the primitive man is less intelligent than the lower mammals, less intelligent than birds and reptiles, less intelligent even than insects? Unless we say this, we must say that the primitive man distinguishes the living from the not-living, and if we credit him with intelligence higher than that of brutes, we must infer that he distinguishes the living from the not-living better than brutes do. The tests which other creatures use, and which the superior among them rightly use in nearly all cases, he

also must use. the only difference being that occasional errors of classing into which the most developed among other creatures fall, he avoids.

It is true that the uncivilized man as we now find him, commonly errs in his classification when shown certain products of civilized art, having traits of structure or behaviour like those of living things. By the Esquimaux, Ross's vessels were thought alive—moving as they did without oars; and Thomson says of the New Zealanders, that "when Cook's ship hove in sight, the people took her for a whale with wings." Andersson tells us that by the Bushmen, a waggon was supposed to be animated, and to want grass: its complexity, its symmetry, and its moving wheels, being irreconcilable with their experiences of inanimate things. "It is alive," said an Arawak to Brett, on seeing a pocket-compass. That a watch is taken by savages for a living creature, is a fact frequently noted. And we have, again, the story told by one of the Arctic voyagers of the Esquimaux, who, ascribing life to a musical box and a barrel-organ, regarded the one as the child of the other.

But automatic instruments emitting various sounds, are in that respect strikingly like many animate bodies. The motions of a watch, apparently uncaused by anything external, seem spontaneous; and hence the ascription of life is quite natural. We must exclude these mistakes made in classing things which advanced arts have made to simulate living things; since such things mislead the primitive man in ways unlike those in which he can be misled by the natural objects around him. Limiting ourselves to his conceptions of these natural objects, we cannot but conclude that his classification of them into animate and inanimate, is substantially correct.

Concluding this, we are obliged to diverge at the outset from certain interpretations currently given of his superstitions. The assumption, tacit or avowed, that the primitive man tends to ascribe life to things which are not

living, is clearly an untenable assumption. Consciousness of the difference between the two, growing ever more definite as intelligence evolves, must be in him more definite than in all lower creatures. To suppose that without cause he begins to confound them, is to suppose the process of evolution is inverted.

§ 66. It is, indeed, said that undeveloped human intelligence daily shows a tendency to confound them. Certain facts are referred to as implying that children fail in the discrimination. Were not this evidence vitiated by the suggestions of adults, it would have weight. But on remembering that when trying to pacify a child that has hurt itself against some inanimate object, a mother or nurse will affect to take the child's part against this object, perhaps saying, "Naughty chair to hurt baby—beat it!" we shall suspect that the notion does not originate with the child but is taught to it. The habitual behaviour of children to surrounding things implies no such confusion. Unless an inanimate object so far resembles an animate one as to suggest the idea that it may be a motionless living creature which will presently move, a child shows no fear of it. True, if an inanimate thing moves without a perceived external force, alarm results. Unlike as a thing may be to living things, yet if it displays this spontaneity characteristic of living things, the idea of life is aroused, and a scream may be caused. But otherwise, life is no more ascribed by a child than by a puppy or a kitten. Should it be said that, given as it is to dramatizing, an older child, endowing its playthings with personalities, speaks of them and fondles them as though they were living, the reply is that this is not belief but deliberate fiction. Though pretending that the things are alive, the child does not really think them so. Were its doll to bite, it would be no less astounded than an adult would be. To secure that pleasurable action of unused faculties called play, many intelligent creatures thus

dramatize; and, lacking the required living objects, will accept as representing them, non-living objects—especially if these can be made to simulate life. But the dog pursuing a stick does not think it alive. If he gnaws it after catching it, he does but carry out his dramatized chase: did he think the stick alive, he would bite it as eagerly before it was thrown as after.

It is further alleged that even the grown man sometimes betrays a lurking tendency to think of inanimate objects as animate. Made angry by resistance to his efforts, he may in a fit of rage swear at some senseless thing, or dash it on the ground, or kick it. But the obvious interpretation is that anger, like every strong emotion, tends to discharge itself in violent muscular actions, which must take some direction or other; that when, as mostly happens, the cause of the anger is a living object, the muscular actions have been directed towards the injury of this object; and that the established association directs the muscular discharges in the same way when the object is not living, if there is nothing to determine them in any other way. But the man who thus vents his fury cannot be said to think the thing is alive, though this mode of discharging his irritation makes him seem to think so.

None of these facts, then, imply any real confusion between the animate and the inanimate. The power to distinguish between the two, which is one of the first powers vaguely shown even by creatures devoid of special senses, which goes on increasing as intelligence evolves, and which becomes complete in the civilized man, must be regarded as approaching completeness in the uncivilized man. It cannot be admitted that he confuses ideas which, through all lower forms of mind, have been growing clear.

§ 67. "How, then, are we to explain his superstitions?" it will be asked. "That these habitually imply the ascription of life to things not alive, is undeniable. If the primitive man has no proclivity to this confusion, how is it

possible to explain the extreme prevalence, if not the universality, of beliefs which give personalities, and tacitly ascribe animation, to multitudes of inanimate things ? ”

The reply is, that these cannot be primary beliefs, but must be secondary beliefs into which the primitive man is betrayed during his early attempts to understand the surrounding world. The incipiently-speculative stage must come after a stage in which there is no speculation—a stage in which there yet exists no sufficient language for carrying on speculation. During this stage, the primitive man no more tends to confound animate with inanimate than inferior creatures do. If in his first efforts at interpretation, he forms conceptions inconsistent with this pre-established distinction between animate and inanimate, it must be that some striking experience misleads him—introduces a germ of error which develops into an erroneous set of interpretations.

What is the germinal error? We may fitly seek for it amid those experiences which mask the distinction between animate and inanimate. There are continually-recurring states in which living things simulate things not alive; and in certain attendant phenomena we shall find the seed of that system of superstitions which the primitive man forms.

CHAPTER X.

THE IDEAS OF SLEEP AND DREAMS.

§ 68. A CONCEPTION which is made so familiar to us during education that we mistake it for an original and necessary one, is the conception of Mind, as an internal existence distinct from body. The hypothesis of a sentient, thinking entity, dwelling within a corporeal framework, is now so deeply woven into our beliefs and into our language, that we can scarcely imagine it to be one which the primitive man did not entertain, and could not entertain.

Yet we have but to ask what is given in experience to the untaught human being, to see that there is nothing to tell him of any such existence. From moment to moment he sees things around, touches them, handles them, moves them hither and thither. He knows nothing of sensations and ideas—has no words for them. Still less has he any such highly-abstract word or conception as consciousness. He does not think about thought, neither his faculties nor his language suffice for this. During early stages he merely thinks without observing that he thinks; and therefore never asks how he thinks, and what it is which thinks. His senses make him conversant only with things externally existing, and with his own body; and he transcends his senses only far enough to draw concrete inferences respecting the actions of these things. An invisible, intangible entity, such as Mind is inferred to be, is a high abstraction unthinkable by him, and inexpressible by his vocabulary.

This, which is obvious *à priori*, is verified *à posteriori*. The savage cannot speak of internal intuition except in terms of external intuition. We ourselves, indeed, when saying that we *see* something that has been *clearly* explained, or *grasp* an argument *palpably* true, still express mental acts by words originally used to express bodily acts. And this use of words implying vision and touch, which with us is metaphorical, is, with the savage, not distinguished from literal. He symbolizes his mind by his eye. (See *Principles of Psychology*, § 404.)

But until there is a conception of Mind as an internal principle of activity, there can be no such conception of dreams as that which we have. To interpret the sights and sayings and doings we are conscious of during sleep, as activities of the thinking entity which go on while the senses are closed, is impossible until the existence of this thinking entity is recognized. Hence arises the inquiry—What explanation is given of dreams before the conception of Mind exists.

§ 69. Hunger and repletion, both very common with the primitive man, excite dreams of great vividness. Now, after a bootless chase and a long fast, he lies exhausted; and, while slumbering, goes through a successful hunt—kills, skins, and cooks his prey, and suddenly wakes when about to taste the first morsel. To suppose him saying to himself—"It was all a dream," is to suppose him already in possession of that hypothesis which we see he cannot have. He takes the facts as they occur. With perfect distinctness he recalls the things he saw and the actions he performed, and he accepts undoubtably the evidence of memory. True, he all at once finds himself lying still. He does not understand how the change took place; but, as we have lately seen, the surrounding world familiarizes him with unaccountable appearances and disappearances, and why should not this be one? If, at another time, lying gorged

with food, the disturbance of his circulation produces nightmare—if, trying to escape and being unable, he fancied himself in the clutches of a bear, and wakes with a shriek; why should he conclude that the shriek was not caused by an actual danger? Though his squaw is there to tell him that she saw no bear, yet she heard his shriek, and like him has not the remotest notion that a mere subjective state can produce such an effect—has, indeed, no terms in which to frame such a notion.

This interpretation of a dream as an actual experience, is confirmed by narration of it in imperfect language. We are apt to forget that discriminations easy to us, are impossible to those who have but few words, all concrete in their meanings, and only rude propositional forms in which to combine these words. When we read that in the language of so advanced a people as the ancient Peruvians, the word *huaca* meant "idol, temple, sacred place, tomb, figures of men, animals, etc., hill," we may judge how extremely indefinite must be the statements which the vocabularies of the rudest men enable them to make, and when we read of an existing South American tribe, that the proposition—"I am an Abipone," is expressible only in the vague way—"I, Abipone," we cannot but infer that by such undeveloped grammatical structures, only the simplest thoughts can be rightly conveyed. When, further, we learn that among the lowest men the inadequate words indefinitely combined are also imperfectly pronounced, as, for instance, among the Akka, whose speech struck Schweinfurth by its inarticulateness, we recognize a third cause of confusion. And thus prepared, we need feel no surprise on being told that the Zuni Indians require "much facial contortion and bodily gesticulation to make their sentences perfectly intelligible," that the language of the Bushmen needs so many signs to eke out its meaning, that "they are unintelligible in the dark," and that the Arapahos "can hardly converse with one another in the dark."

If, now, remembering all

this, we ask what must happen when a dream is narrated by a savage, we shall see that even supposing he suspects some distinction between ideal actions and real actions, he cannot express it. His language does not enable him to say—"I dreamt that I saw," instead of—"I saw." Hence each relates his dreams as though they were realities; and thus strengthens in every other, the belief that his own dreams are realities.

What then is the resulting notion? The sleeper has been visibly at rest. On awaking he recalls various occurrences, and repeats them to others. He thinks he has been elsewhere, witnesses say he has not; and their testimony is verified by suddenly finding himself where he was when he went to sleep. The simple course is that of believing both that he has remained and that he has been away—that he has two individualities, one of which leaves the other and presently comes back. He, too, has a double existence, like many other things.

§ 70. From all quarters there come proofs that this is the conception actually formed of dreams by savages—a conception which continues to be held after considerable advances in civilization have been made. Here are a few of the testimonies.

Schoolcraft tells us that the North American Indians in general, think "there are duplicate souls, one of which remains with the body, while the other is free to depart on excursions during sleep;" and, according to Crantz, the Greenlanders believe "that the soul can forsake the body during the interval of sleep." Thomson says the New Zealanders believed "that during sleep the mind left the body, and that dreams are the objects seen during its wanderings;" and in Fiji, "it is believed that the spirit of a man who still lives will leave the body to trouble other people when asleep." Similarly in Borneo. It is, according to St. John, the conviction of the Dyaks that "the soul

during sleep goes on expeditions of its own, sees, hears, and talks," and Rajah Brooke also says "the Dyaks believe that those things which have been brought vividly before their minds in *dreams* have *actually* taken place." Among Hill-tribes of India, such as the Karens, the same doctrine is held. their statement, as given by Mason, being that "in sleep it [the L^a, spirit or ghost] wanders away to the ends of the earth, and our dreams are what the L^a sees and experiences in his perambulations." Even by the ancient Peruvians, developed as was the social state they had reached, the same interpretation was put upon the facts. They held, says Garcilasso, that "the soul leaves the body while it is sleeping. They asserted that the soul could not sleep, and that the things we dream are what the soul sees in the world while the body sleeps."

Occurring rarely, it may be, somnambulism serves, when it does occur, to confirm this interpretation. For to the uncritical, a sleep-walker seems to be exemplifying that activity during sleep, which the primitive conception of dreams implies. Each phase of somnambulism furnishes its evidence.

Frequently the sleeper gets up, performs various actions, and returns to rest without waking; and sometimes, recalling afterwards these actions, and regarding them as ordinary dream-fancies, is surprised when told by witnesses that he actually did the things he dreamt about doing. What construction must be put on such an experience by primitive men? It proves to the somnambulist that he may go away and lead an active life during his sleep, and yet find himself afterwards in the place where he lay down. With equal conclusiveness it proves to those who saw him, that men actually go away during their sleep; that they do the things they dream of doing; and may even sometimes be visible. True, a careful examination of the facts would show that in this case the man's body was absent from its place of rest. But savages do not carefully examine the facts. Again, in cases

where the sleep-walker has no recollection of the things he did, there is still the testimony of others to show him that he was not quiescent; and occasionally there is more. When, as sometimes happens, his night-ramble brings him in contact with an obstacle which wakes him, he has a demonstration of the alleged fact that he goes hither and thither during sleep. On returning to his sleeping-place he does not, indeed, find a second self there, but this discovery, irreconcilable with the accepted notion, simply increases the confusion of his ideas about these matters. Unable to deny the evidence that he wanders during sleep, he takes this in verification of the current belief, without dwelling much on the inconsistency.

When we consider what tradition, with its exaggerations, is likely to make of these abnormal phenomena, now and then occurring, we shall see that the primitive interpretation of dreams must receive from them strong support.

§ 71 Along with this belief there of course goes the belief that persons dreamt of were really met. If the dreamer thinks his own actions real, he ascribes reality to whatever he saw—place, thing, or living being. Hence a group of facts similarly prevalent.

Morgan states that the Iroquois think dreams real, and obey their injunctions—do what they are told by those they see in dreams, and of the Chippewas, Keating asserts that they fast for the purpose of “producing dreams, which they value above all things.” According to Drury, the Malagasy “have a religious regard to dreams, and think that the good *dæmon* * * * comes, and tells them in their dreams when they ought to do a thing, or to warn them of some danger.” Ellis tells us that the Sandwich Islanders think the departed member of a family “appears to the survivors sometimes in a dream, and watches over their destinies;” and, similarly, he tells us of the Tahitians that they thought the spirit of the dead sometimes appeared to the sur-

vivors in dreams. In Africa it is the same. The Congo people, as described by Reade, "think that what they see and hear in dreams come to them from spirits," and, writing of the East Africans, Krapf says the "Wanika believe that the spirits of the dead appear to the living in dreams." The Kaffirs, too, Shooter tells us, "seem to ascribe dreams in general to the spirits." Abundant evidence is furnished by the Rev. Dr. Callaway concerning the Zulus, whose ideas he has written down from their own mouths. Comparatively intelligent as these people are, somewhat advanced in social state, and having language enabling them to distinguish between dreaming and waking perceptions, we nevertheless find among them (joined with an occasional scepticism) an habitual belief in the reality of the persons who appear in dreams. Out of many illustrations, here is one of a man who complains how he is plagued by the spirit of his brother. He tells his neighbours.—

"I have seen my brother" They ask what he said He says, "I dreamed that he was beating me, and saying, 'How is it that you do no longer know that I am'" I answered him, saying, 'When I do know you, what can I do that you may see I know you? I know that you are my brother' He answered me as soon as I said this, and asked, 'When you sacrifice a bullock, why do you not call upon me?' I replied, 'I do call on you, and laud you by your laud-giving names Just tell me the bullock which I have killed without calling on you For I killed an ox, I called on you, I killed a barren cow, I called on you' He answered, saying, 'I wish for meat' I refused him, saying, 'No, my brother, I have no bullock, do you see any in the cattle-pen?' He replied, 'Though there be but one, I demand it' When I awoke, I had a pain in my side," etc.

Though this perfectly-definite conception of a dead brother as a living person who demands meat, and inflicts bodily pain for non-compliance, is so remote from our own beliefs as to seem scarcely possible, yet we shall see its possibility on remembering how little it differs from the beliefs of early civilized races. At the opening of the second book of the *Iliad*, we find the dream sent by Jove to mislead the Greeks, described as a real person receiving Jove's

directions what he is to say to the sleeping Agamemnon. In like manner, the soul of Patroclus appeared to the sleeping Achilles, "in all things like himself," saying, "Bury me soon that I may pass the gates of Hades," and, when grasped at, "like smoke vanished with a shriek" the appearance being accepted by Achilles as a reality, and its injunction as imperative. Hebrew writings show us the like. When we read that "the word of the Lord came unto Abraham in a vision," that "God came to Abimelech in a dream by night," that "the Lord came, and stood, and called as at other times, Samuel, Samuel," we see shown an equally unhesitating belief in an equally objective reality. During civilization this faith has been but slowly losing ground, and even still survives, as we are shown by the stories from time to time told of people who when just dead appeared to distant relations, and as we are shown by the superstitions of the "spiritualists."

Indeed, after recalling these last, we have but to imagine ourselves de-civilized—to suppose faculty decreased, knowledge lost, language vague, criticism and scepticism absent, to understand how inevitably the primitive man conceives as real the dream-personages we know to be ideal.

§ 72. A reflex action on other beliefs is exercised by these beliefs concerning dreams. Besides fostering a system of erroneous ideas, this fundamental misconception discredits the true ideas which accumulated experiences of things are ever tending to establish.

For while the events dreamed are accepted as events that have actually occurred—while the order of phenomena they exhibit is taken to be an actual order; what must be thought about the order of phenomena observed while awake? Such uniformities in it as daily repetition makes conspicuous, cannot produce that sense of certainty they might produce if taken by themselves, for in dreams these uniformities are not maintained. Though trees and stones seen when

awake, do not give place to other things which panoramically change, yet, when the eyes are closed at night, they do. While looking at him in broad daylight, a man does not transform himself, but during slumber, something just now recognized as a companion, turns into a furious beast, threatening destruction; or what was a moment since a pleasant lake, has become a swarm of crocodiles and snakes. Though, when awake, the ability to leave the earth's surface is limited to a leap of a few feet, yet, when asleep, there occasionally comes a consciousness of flying with ease over vast regions.

Thus, the experiences in dreams continually contradict the experiences received during the day; and go far towards cancelling the conclusions drawn from day-experiences. Or rather, we may say that they tend to confirm the erroneous conclusions suggested by day-experiences, instead of the correct conclusions. For do not these sudden appearances and disappearances in dreams, prove, like many facts observed when awake, that things can pass unaccountably from visible to invisible states, and *vice versa*? And do not these dream-transformations thoroughly accord with those other transformations, some real and some apparent, which make the primitive man believe in an unlimited possibility of metamorphosis? When something which in his dream he picked up as a stone, becomes alive, does not the fact seem to harmonize with his discoveries of fossils having the hardness of stones with the shapes of living things? And is not the sudden abandonment of a tiger-shape for the shape of a man, which his dream shows him, akin to that of the insect-metamorphoses he has noticed, and to the seeming transformations of leaves into walking creatures?

Clearly, then, the acceptance of dream-activities as real activities, besides the fundamental misconception it generates, strengthens misconceptions of the same kind otherwise generated. It strengthens them both negatively and positively. It discredits those waking-experiences from

which right beliefs are to be drawn; and it yields support to those waking experiences which suggest wrong beliefs.

- § 73. That the primitive man's conception of dreaming is natural, and indeed necessary, will now be obvious. His notions seem strange because, in thinking about them, we inadvertently carry with us the theory of Mind which civilization has slowly established and embodied in language, and which, early in life, we unawares absorb so completely as to mistake it for an original possession. Mind, however, is neither disclosed by the senses, nor directly revealed as an internal entity. there is no state of consciousness in which it is presented. The fact that even now some metaphysicians hold that nothing beyond impressions and ideas can be known to exist, while others hold that impressions and ideas imply a something of which they are states, and by which they are held together as a continuous whole, shows clearly that Mind, as conceived by us, is not an intuition but an implication, and therefore cannot be conceived until reasoning has made some progress.

When, indeed, we look closely into the matter, we discover that there can be no conception of Mind, properly so called, until the difference between impressions and ideas is clearly recognized. Like every child, the primitive man passes through a phase of intelligence during which there has not yet arisen the power of introspection implied by saying—"I think—I have ideas." For a long time the observations generalized are exclusively those concerning the natures and powers of objects, together with those concerning the active and re-active forces and feelings of the organism itself. While awake, the thoughts that perpetually accompany sensations and the perceptions framed of them, are so unobtrusive, and pass so rapidly, that they are not noticed: to notice them implies a self-criticism impossible at the outset. These faint states of consciousness which, during the day, are obscured by the vivid states, become obtrusive only

at night, when the eyes are shut and the other senses dulled. Then, only, do the subjective activities clearly reveal themselves, as the stars reveal themselves when the sun is absent. That is to say, dream-experiences necessarily precede the conception of a mental self, *and are the experiences out of which the conception of a mental self eventually grows.* Mark the order of dependence — Dreams cannot be interpreted as we interpret them, in the absence of the hypothesis of mind as a distinct entity; the hypothesis of mind as a distinct entity cannot exist before the experiences suggesting it; the experiences suggesting it are the dream-experiences, which seem to imply two entities; and in its primary form this supposition of two entities involves the notion that the second entity differs from the first simply in being absent and active at night while the other is at rest. Only as this supposed duplicate, once thought of as like the original in all things, becomes gradually modified by the dropping of physical characters irreconcilable with the facts, does the hypothesis of a mental self, as we understand it, become established.

Here, then, is the germinal principle which sets up such organization as the primitive man's random observations of things can assume. This belief in another self belonging to him, harmonizes with all those illustrations of duality furnished by things around; and equally harmonizes with those multitudinous cases in which things pass from visible to invisible states and back again. Nay more, by comparison he discovers a kinship between his own double and the doubles of other objects. For have not these objects their shadows? Has not he too his shadow? Does not his shadow become invisible at night? Is it not obvious, then, that this shadow which in the day accompanies his body is that other self which at night wanders away and has adventures? Clearly, the Greenlanders who, as we have seen, believe this, have some justification for the belief.

CHAPTER XI.

THE IDEAS OF SWOON, APOPLEXY, CATALEPSY, ECSTASY, AND OTHER FORMS OF INSENSIBILITY.

§ 74. THE quiescence of ordinary sleep is daily seen by the savage to be quickly exchanged for activity when the slumberer is forcibly disturbed a noise or a shake causes him to open his eyes, to speak, to rise. Differences in the amounts of the required disturbances are, indeed, observable. Now the slightest sound or touch suffices; and now it needs a shout, or rough handling, or pinching. Still, his experience shows that when a man's body lies motionless and insensible, a mere calling of the name causes re-animation.

Occasionally, however, something quite different happens. Here is a companion exhibiting signs of extreme pain, who, all at once, sinks down into an inert state; and at another time, a feeble person making a violent effort, or one greatly terrified, undergoes a like change. In those who behave thus, the ordinary sensibility cannot be forthwith re-established. Though the Fijian, in such case, calls the patient by his name, and is led by the ultimate revival to believe that his other self may be brought back by calling, yet there is forced on him the fact that the absence of the other self is unlike its ordinary absences. Evidently, the occurrence of this 'special insensibility, commonly lasting less than a minute but occasionally continuing for hours,

yields support to the primitive belief in a duplicate that wanders away from the body and returns to it the desertion of the body being now more determined than usual, and being followed by silence as to what has been done or seen in the interval.

Our familiar speech shows the way in which syncope yields seeming verification of the primitive notion of duality. We say of one who revives from a fainting fit, that she is "coming back to herself"—"returning to herself." The expressions are significant. Though we no longer explain insensibility as due to an absence of the sentient entity from the body, yet our phrases bear witness to a time when insensibility was so explained.

§ 75. Apoplexy "is liable to be confounded with syncope or fainting, and with natural sleep" And if the instructed medical man thus describes it, we may infer how little it can be discriminated by savages.

Suddenly falling, the apoplectic patient betrays a "total loss of consciousness, of feeling, and of voluntary movement." The breathing is sometimes natural, as in quiet sleep; and sometimes the patient lies "snoring loudly as in deep sleep" In either case, however, it presently turns out that the sleeper cannot be "brought back to himself" as usual shouts and shakes have no effects.

Recalling his dream-experiences, what must the savage think about a fellow-savage in this state; which continues perhaps for a few hours but occasionally for several days? Clearly the belief in duality is strengthened. The second self has gone away for a time beyond recall, and when it eventually comes back, nothing can be learnt about its experiences while absent.

If, as commonly happens, after months or years there comes a like fall, a like prolonged insensibility, and a like return, there is again a silence about what has been done. And then, on a third occasion, the absence is longer than

before—the relatives wait and wait, and there is no coming back. the coming back seems postponed indefinitely.

§ 76. Similar in the suddenness with which it commences, but otherwise dissimilar, is the state of insensibility called catalepsy; which also lasts sometimes several hours and sometimes several days. Instantaneous loss of consciousness is followed by a state in which the patient “presents the air of a statue rather than that of an animated being” The limbs, placed in this or that position, remain fixed. the agent which controlled them seems absent, and the body is passive in the hands of those around.

Resumption of the ordinary state is as instantaneous as was cessation of it. And, as before, “there is no recollection of anything which occurred during the fit” That is to say, interpreting the facts according to their primary meanings—the wandering other self will give no account of its adventures.

That this conception, carrying out their conception of dreams, is entertained by savages, we have direct testimony. In his account of the Chippewas, Keating says, concerning the journeyings of souls, that some “are the souls of persons in a lethargy or trance. Being refused a passage, these souls return to their bodies and re-animate them.” And that a kindred conception has been general, is inferrable from the fact named by Mr. Fiske in his *Myths and Myth-makers*, that “in the Middle Ages the phenomena of trance and catalepsy were cited in proof of the theory that the soul can leave the body and afterwards return to it.”

§ 77. Yet another, but closely related, form of insensibility has to be named, as yielding evidence similarly interpretable. I refer to ecstasy. While, by making no responses to ordinary stimuli, the ecstatic subject shows that he is “not himself,” he seems to have vivid perceptions of things elsewhere.

Sometimes "induced by deep and long-sustained contemplation," ecstasy is characterized by "a high degree of mental excitement, co-existing with a state of unconsciousness of all surrounding things" While the muscles are "rigid, the body erect and inflexible," there is "a total suspension of sensibility and voluntary motion" During this state, which in some cases recurs daily, "visions of an extraordinary nature occasionally occur," and "can be minutely detailed afterwards."

That witnessing such phenomena tends to make still stronger the primitive belief that each man is double, and that one part can leave the other, is manifest; and that it does strengthen them we have facts to show. In Dr. Callaway's account of the Zulu's beliefs, Undayeni is described as being able to see "things which he would not see if he were not in a state of ecstasy." a statement which, joined with their interpretation of dreams, makes it manifest that the visions of his ecstatic state were regarded by the Zulus as experiences of his wandering other self.

§ 77. I need not detail all the phases of coma, having the common trait of an unconsciousness more or less unlike that of sleep They vary in degree from "a state of slight temporary drowsiness and torpor to one of profound and permanent stupor, with general paralysis of feeling and motion" From simple lethargy, contrasted with natural sleep "chiefly in being more prolonged"—from the temporary inanimateness of asphyxia and the stupor produced by narcotics, we pass to the extreme forms above instanced. all of them being interpretable in the same primitive way.

But there is one other kind of insensibility, highly significant in its implications, which remains to be noticed—the insensibility which direct injury produces. This has two varieties. the one following loss of blood, and the other following concussion.

When treating of the familiar insensibility known as

swoon, I purposely refrained from including loss of blood among the causes named. this origin not being visibly allied to its other origins. Leading, as he does, a life of violence, now in conflict with animals chased and now in conflict with enemies, brute or human, the primitive man often experiences, or witnesses, fainting from anæmia. Not that he connects cause and effect in this definite way. What he now and then sees is, that after a serious wound comes a sudden collapse, with closed eyes, immobility, speechlessness. For awhile there is no response to a shake or a call. Presently his wounded fellow-warrior "returns to himself"—opens his eyes and speaks. Again the blood gushes from his wound, and after a time he is again absent. Perhaps there is a revival and no subsequent unconsciousness; or, perhaps, after the next revival, there comes a third quietude—a quietude so prolonged that hope of immediate return is given up.

Sometimes the insensibility has a somewhat different antecedent. In battle, a blow from a waddy lays low a companion, or a club brought down with force on the ^{head} of an enemy reduces him to a motionless mass. The one or the other may be only stunned; and after a brief interval, during which no response is made to words or shakes, there is a "re-animation." Or the stroke may have been violent enough to cause concussion of the brain, or fracture of the skull and consequent pressure on the brain. That is to say, there may result prolonged insensibility, followed by incoherent speech and feeble motion, after which may come a second lapse into unconsciousness—perhaps ending after another interval or perhaps indefinitely continued.

§ 79. Joined with the evidence which sleep and dreams furnish, this evidence furnished by abnormal states of insensibility, originates a group of notions concerning temporary absences of the other self. A swoon, interpreted as above, is often preceded by feelings of weakness in the

patient and signs of it to the spectators. Hence these rouse the suspicion that the other self is about to desert; and there comes anxiety to prevent its desertion. Revival of a fainting person has often taken place while he was being called to : seemingly in response to the call. Hence the question—will not calling bring back the other self about to desert? Some savages infer that it will. The Fijian, according to Williams, may sometimes be heard to bawl out lustily to his own soul to return to him. Among the Karens, a man is constantly in fear lest his other self should leave him : sickness or languor being regarded as signs of its absence, and offerings and prayers being made to bring it back. Especially odd is the behaviour, described by Mason, which this belief causes at a funeral

“ On returning from the grave, each person provides himself with three little hooks made with branches of trees, and calling his spirit to follow him, at short intervals, as he returns, he makes a motion as if hooking it, and then thrusts the hook into the ground. This is done to prevent the spirit of the living from staying behind with the spirit of the dead ”

Similarly with the graver forms of insensibility. Mostly occurring, as apoplexy, trance, and ecstasy do, to persons otherwise unwell, these prolonged absences of the other self become mentally associated with its impending absences at other times; and hence an interpretation of ill-health or disease. Among some Northern Asiatic tribes disease is ascribed to the soul's departure. By the Algonquins, a sick man is regarded as a man whose “ shadow ” is “ unsettled, or detached from his body ”. And in some cases the Karens suppose one who is taken ill and dying to be one who has had his soul transferred to another by witchcraft.

Various beliefs naturally arise respecting the doings of the other self during these long absences. Among the Dyaks, “ elders and priestesses often assert that in their dreams they have visited the mansion of Tapa (the Supreme God), and seen the Creator dwelling in a house like that of a Malay, the interior of which was adorned with guns and

gongs and jars innumerable, Himself being clothed like a Dyak." And Hind speaks of a Cree Indian who asserted that he had once been dead and visited the spirit-world : his alleged visit, said by Hind to have been during a dream, being probably, like the alleged visits of the Dyaks, a vision during abnormal insensibility. For these persistent desertions by the other self are in various places explained as consequent on journeys to the world of spirits. Instances are given by Mr. Tylor of this interpretation among the Australians, the Khonds, the Greenlanders, the Tatars ; and he names Scandinavian and Greek legends implying the same notion.

I may add, as one of the strangest of these derivative beliefs, that of certain Greenlanders, who, according to Crantz, think that the soul can "go astray out of the body for a considerable time. Some even pretend, that when going on a long journey they can leave their souls at home, and yet remain sound and healthy."

Thus what have become with us figurative expressions, remain with men in lower states literal descriptions. The term applied by Southern Australians to one who is unconscious, means "without soul"; and we say that such an one is "inanimate." Similarly, though our thoughts respecting a debilitated person are no longer like those of the savage, yet the words we use to convey them have the same original implication : we speak of him as having "lost his spirit."

§ 80. The actual beliefs just instanced, like those instanced in foregoing chapters, carry us somewhat beyond the mark. Evolution has given to the superstitions we now meet with, more specific characters than had the primitive ideas out of which they grew. I must therefore, as before, ask the reader to ignore the specialities of these interpretations, and to recognize only the trait common to them. The fact to be observed is that the abnormal forms of insensibility now and then witnessed, are inevitably inter-

puted after the same manner as is the normal form of insensibility daily witnessed : the two interpretations supporting one another.

The primitive man sees very various durations of the insensible state and very various degrees of the insensibility. There is the doze in which the dropping of the head on the breast is followed by instant waking, there is the ordinary sleep, ending in a few minutes or continuing many hours, and varying in profundity from a state broken by a quiet call of the name to a state not broken without shouts and shakes, there is lethargy in which slumber is still longer, and the waking short and imperfect ; there is swoon, perhaps lasting a few seconds or perhaps lasting hours, from which the patient now seems brought back to himself by repeated calls, and now obstinately stays away ; and there are apoplexy, catalepsy, ecstasy, and other kinds of coma, lasting for long periods and similar in the persistence of the insensibility, though dissimilar in the accounts the patient gives on returning to himself. Further, these various comatose states differ as ending, sometimes in revival, and sometimes in a quiescence which becomes complete and indefinitely continued : the other self remaining so long away that the body goes cold.

Most significant of all, however, is the experience that states of insensibility follow deep wounds and violent blows. Though for other losses of consciousness the savage saw no antecedents, yet for each of these the obvious antecedent was the act of an enemy. And this act of an enemy produced variable results. Now, the injured man shortly "returned to himself," and did not go away again ; and now, returning to himself only after a long absence, he presently deserted his body for an indefinite time. Lastly, instead of these temporary returns followed by final absence, there now and then occurred cases in which a violent blow caused continuous absence from the first. the other self was not perceived to come back at all.

CHAPTER XII

THE IDEAS OF DEATH AND RESURRECTION.

§ 81. WE assume without hesitation that death is easily distinguished from life ; and we assume without hesitation that the natural ending of life by death, must have been always known as it is now known. Each of the assumptions, thus undoubtingly made, is erroneous.

“ Nothing is more certain than death, nothing is at times more uncertain than its reality and numerous instances are recorded of persons prematurely buried, or actually at the verge of the grave, before it was discovered that life still remained, and even of some who were resuscitated by the knife of the anatomist ”

This passage, which I extract from Forbes and Tweedie's *Cyclopædia of Practical Medicine*, is followed by an examination of the tests commonly trusted showing that they are all fallacious. If, then, having the accumulated experiences bequeathed by civilization, joined to that acquaintance with natural death gained through direct observation in every family, we cannot be sure whether revival will or will not take place, what judgments are to be expected from the primitive man, who, lacking all this recorded knowledge, lacks also our many opportunities of seeing natural death? Until facts have proved it, he cannot know that this permanent quiescence is the necessary termination to the state of activity ; and his wandering, predatory life keeps out of view most of the evidence which establishes this truth.

So circumstanced, then, what ideas does the primitive man form of death? Let us observe the course of his thought, and the resulting conduct.

§ 82 He witnesses insensibilities various in their lengths and various in their degrees. After the immense majority of them there come reanimations—daily after sleep, frequently after swoon, occasionally after coma, now and then after wounds or blows. What about this other form of insensibility?—will not reanimation follow this also?

The inference that it will, is strengthened by the occasional experience that revival occurs after immediate expectation of it had ceased. One in course of being buried, or one about to be burned, suddenly comes back to himself. The savage does not, as we should, take this for a proof that the man supposed to be dead was not dead; but it helps to convince him that the insensibility of death is like all the other insensibilities—only temporary. Even were he critical, instead of being incapable of criticism, the facts would go far to justify his belief that in these cases reanimation is only longer postponed.

That this confusion, naturally to be expected, actually exists, we have direct evidence. Arbousset and Daumas quote the proverb of the Bushmen—"Death is only a sleep." Concerning the Tasmanians, Bonwick writes:—"When I asked Mungo the reason of the spear being stuck in the tomb, he replied quietly, 'To fight with when he is asleep.'" Even of so superior a race as the Dyaks, we are told by St. John that they have great difficulty in distinguishing sleep from death. Perceval says that when a Toda dies, the people "entertain a lingering hope that till putrefaction commences, reanimation may possibly take place." More clearly still is this notion of revival implied in the reasons given for their practices by two tribes—one in the Old World and one in the New—who, in extreme degrees, unite brutality with stupidity. Galton says that the corpse of a

Damara, having been sewn-up sitting "in an old ox-hide," is buried in a hole, and "the spectators jump backwards and forwards over the grave to keep the deceased from rising out of it" And we learn from Southey that, among the Tupis, "the corpse had all its limbs tied fast, that the dead man might not be able to get up, and infest his friends with his visits"

Apart from avowed convictions and assigned reasons, abundant proofs are furnished by the resulting behaviour; as in the instances last given Let us contemplate the various acts prompted by the belief that the dead return to life.

§ 83. First of all come attempts to revive the corpse—to bring back the other-self. These are sometimes very strenuous, and very horrible. Alexander tells us of the Arawaks, that a man who had lost his two brothers "cut thorny twigs, and beat the bodies all over, uttering at the same time 'Heia! heia!' as if he felt the pain of the flagellation. * * * Seeing that it was impossible to reanimate the lifeless clay, he opened their eyes, and beat the thorns into the eyeballs, and all over the face." Similarly, we learn from Sparman that the Hottentots reproach and ill-use the dying, and those just dead, for going away.

This introduces us to the widely-prevalent practice of talking to the corpse primarily with the view of inducing the wandering duplicate to return, but otherwise for purposes of propitiation. The Fijian thinks that calling sometimes brings back the other-self at death; and we read that the Moondes, or Hos, even call back the spirit of a corpse that has been burnt. Cruickshank says that the Fantees addressed the corpse "sometimes in accents of reproach for leaving them; at others beseeching his spirit to watch over and protect them from evil." During their lamentations, the Caribs asked "the deceased to declare the cause of his departure from the world." In Loango, a dead

man's relatives question him for two or three hours why he died; and on the Gold Coast, "the dead person is himself interrogated" as to the cause of his death · a statement of Beecham confirmed by Winterbottom. So, too, when depositing food, etc. Among the Todas, the sacrificer addressed the deceased, and, naming the cow killed, "said they had sent her to accompany him." Moffat tells us of the Bechuanas that, on bringing things to the grave, an old woman addresses to the corpse the words—"There are your articles." And according to Hall, the Innuits visit the graves, talk to the dead, leave food, furs, etc, saying—"Here, Nukerton, is something to eat, and something to keep you warm "

As implied by the last case, this behaviour, originally adopted towards those just dead, extends to those dead some time. Describing the Bagos, Caillé states that after he is buried "a dead man's relations come and talk to him under the idea that he cares what they say." After burning, also, the same thing sometimes happens. among the old Kookies the ashes are "addressed by the friends of the deceased, and his good qualities recited " And the Malagasy not only "address themselves in an impassioned manner to the deceased," but, on entering the burial-place, inform the surrounding dead that a relative is come to join them, and bespeak a good reception. Even by such comparatively-advanced peoples as those of ancient America, this practice was continued, and, indeed, highly developed. The Mexicans, giving to the deceased certain papers, said :—"By means of this you will pass without danger between the two mountains which fight against each other." With the second, they said · "By means of this you will walk without obstruction along the road which is defended by the great serpent." With the third: "By this you will go securely through the place where there is the crocodile and the ochitonal." So, too, among the Peruvians, the young knights on their initiation, addressed their embalmed an-

cestors, beseeching "them to make their descendants as fortunate and brave as they had been themselves."

After recognizing the truth that death is at first regarded as one kind of temporarily-arrested life, these proceedings no longer appear so absurd. Beginning with the call, which is effectual in waking the sleeper and sometimes seems effectual in reviving one who has swooned, this speaking to the dead develops in various directions; and continues to be a custom even where immediate reanimation is not looked for.

§ 84 The belief that death is a long-suspended animation, has a further effect, already indicated in some of the foregoing extracts. I refer to the custom of giving the corpse food in some cases actually feeding it; and in most cases leaving eatables and drinkables for its use.

Occasionally in trance, the patient, though insensible, swallows morsels put into his mouth. Whether or not such an experience led to it, there exists a practice implying the belief that death is an allied state. Earl says of the Assu Islanders, that several times during the few days after one has died, these Papuans try to make him eat, "and when they find that he does not partake of it, the mouth is filled with eatables, sirri, and arrack, until it runs down the body, and spreads over the floor." Among the Tahitians, "if the deceased was a chief of rank or fame, a priest or other person was appointed to attend the corpse, and present food to its mouth at different periods of the day." So is it with the Malanans of Borneo: when a chief dies, his slaves attend to his imagined wants with the fan, sirri, and betel-nut. Harkness tells us of the Badagas, that, "between death and burning they frequently drop a little grain into the mouth of the deceased."

Mostly, however, the aim is to give the deceased available supplies whenever he may need them. In some cases he is thus provided for while awaiting burial, as among the

Fantees, who place "viands and wine for the use of the departed spirit," near the sofa where the corpse is laid; and as among the Karens, by whom "meat is set before the body as food," before burial and after. Tahitians and Sandwich Islanders, too, who expose their dead on stages, place fruits and water beside them, and the New Zealanders, who similarly furnish provisions, "aver that at night the spirit comes and feeds from the sacred calabashes." Herrera tells us of certain Brazilians, that they put the dead man in "the net or hammock he used to lie in, and during the first days they bring him meat, thinking he lies in his bed." And the belief that the unburied required refreshment, was otherwise shown by the Peruvians, who held a funeral feast, "expecting the soul of the deceased, which, they say, must come to eat and to drink."

So general is the placing of provisions in or upon the grave, that an enumeration of the cases before me would be wearisome. a few must suffice. In Africa may be instanced the Sherbro people, who, Schon says, "are in the habit of carrying rice and other eatables to the graves of their departed friends," the Loango people, who, Proyard says, deposit food at the tomb, the Inland Negroes, who, according to Allen, put food and wine on the graves, and the sanguinary Dahomans, who, according to Burton, place on the grave an iron asen, on which "water or blood, as a drink for the deceased, is poured."

Turning to Asia, we find the practice among the Hill-tribes of India. The Bhils cook rice and leave some where the body was buried, and the rest at the "threshold of his late dwelling, as provision for the spirit," and kindred customs are observed by Santals, Kookies, Karens.

In America, of the uncivilized races, may be named the Caribs; who put the corpse "in a cavern or sepulchre" with water and eatables. But it was by the extinct civilized races that this practice was most elaborated. The Chibchas, shutting up the dead in artificial caves, wrapped them in fine mantles

and placed round them many maize cakes and *mucuras* of *chicha* [a drink], and of the Peruvians, Tschudi tells us that "in front of the bodies they used to place two rows of pots filled with guana, maize, potatoes, dried llama-flesh, etc, covered over with smaller pots. On both sides, in a semi-circle, cooking vessels * * * and pots filled with water and *chicha*, covered with drinking vessels, were placed "

The like is done even along with cremation. Butler tells us that among the Kookies, the widow places "rice and vegetables on the ashes of her husband." The ancient Central Americans had a kindred habit. Oviedo gives thus the statement of an Indian.—"When we are about to burn the body we put beside it some boiled maize in a calabash, and attach it to the body and burn it along with it." Though where the corpse is destroyed by fire, we must suppose that the conception of reanimation in its original form has died out, this continued practice of supplying food indicates a past time when reanimation was conceived literally. And, indeed, on finding that the Kookies, some of whom bury their dead while others burn them, supply eatables in either case, we can scarcely doubt this.

§ 85. What is the limit to the time for the return of the other-self? Hours have elapsed and the insensible have revived; days have elapsed and the insensible have revived; will they revive after weeks or months, and then want food? The primitive man cannot say. The answer is at least doubtful, and he takes the safe course. he repeats the supplies of food.

It is thus with the indigenes of India. Among the Bodo and Dhimals, the food and drink laid on the grave are renewed after some days, "and the dead is addressed"; among the Kookies the corpse being "deposited upon a stage raised under a shed," food and drink are "daily brought, and laid before it." By American races this custom is carried much further. Hall tells us of the

Innuits that "whenever they return to the vicinity of the kindred's grave, a visit is made to it with the best food" as a present, and Schoolcraft says of the Dakotahs that "for one year they visit the place of the dead, and carry food and make a feast for the dead, to feed the spirit of the departed." But in this, as in other ways, the extinct civilized races of America provided most carefully. Motolinia alleges of the Mexicans that "after the burial, they returned to the tomb for twenty days, and put on it food and roses; so they did after eighty days, and so on from eighty to eighty." Concerning the Peruvians of the coast valleys, we learn from Cieza that in former times they used to open the tombs, and renew the clothes and food which were placed in them. Still further were such practices carried with the embalmed bodies of the Yncas. They brought provisions to them, saying—"When you were alive you used to eat and drink of this, may your soul now receive it and feed on it, where-soever you may be." And this statement of Molina concerning one of the festivals, may be joined with that of P. Pizarro; who says they brought out the bodies every day and seated them in a row, according to their antiquity. While the servants feasted, they put the food of the dead on a fire, and their *chicha* vessels before them, and dead and living pledged one another at the banquet.

Here the primitive practice of leaving food with the corpse and repeating the supplies, in doubt how long the revival may be delayed, has developed into a system of observances considerably divergent from the original ones.

§ 86. Other sequences of the belief in reanimation, equally remarkable, may next be named. If the corpse is still in some way alive, like one in a trance, must it not breathe, and does it not require warmth? These questions sundry races practically answer in the affirmative.

Of the Guaranis, Southey writes—"They believe that the soul continued with the body in the grave, for which reason

they were careful to leave room for it" * * * would remove "part of the earth, lest it should lie heavy upon them" * * * sometimes "covered the face of the corpse with a concave dish, that the soul might not be stifled." It is an Esquimaux belief "that any weight pressing upon the corpse would give pain to the deceased." And, writing of the ancient Peruvians, Arriaga states that after the conquest, the Indians used to disinter people buried in the churches, saying that the bodies were very uneasy when pressed by the soil, and liked better to stay in the open air.

A fire serves both to give warmth and for cooking; and one or other of these conveniences is in some cases provided for the deceased. Morgan writes that by the Iroquois "a fire was built upon the grave at night to enable the spirit to prepare its food." Among the Brazilians, according to Burton, it is the habit to "light fires by the side of newly-made graves * * * for the personal comfort of the defunct" In his account of the Sherbro people [Coast Negroes] Schon says that "frequently in cold or wet nights they will light a fire on the graves of their departed friends." By the Western Australians, too, fires are kept burning beside the grave for days; and should the deceased be a person of distinction, these fires are lighted daily for three or four years.

§ 87. Resuscitation as originally conceived, cannot take place unless there remains a body to be resuscitated. However much the belief of the primitive man in a returning other-self, may be joined with a treatment of the corpse calculated to make revival of it impossible, yet expectation of a revival is naturally accompanied by recognition of the need for preserving the corpse from injury. Hence these various observances which provide for the welfare of the inert body while its double is absent, and for the welfare of the reanimated body when its double returns,

are associated with other observances aiming to prevent destruction of the body.

Note, first, sundry indications of the belief that if the body has been destroyed there can be no revival—that there is then annihilation. When Bruce tells us that among the Abyssinians criminals are seldom buried, when we learn from Simon that among the Chibchas the bodies of the greatest criminals were left unburied in the fields; and when we remember the care usually taken of the corpse in avowed anticipation of its renewed life, we may infer the belief that renewal of life is prevented when the body is devoured. This belief we elsewhere find expressed. The New Zealanders held that a man who was eaten by them, was destroyed wholly and for ever. Chapman says the Damaras think that dead men, if buried, “cannot rest in the grave. * * * You must throw them away, and let the wolves eat them, then they won’t come and bother us.” According to Bastian, the Matiamba negroes believe that by throwing their husbands’ corpses into the water, they drown the souls these would otherwise trouble them. And possibly it may be under a similar belief that the Kamtschadales give the corpse “for food to their dogs.”

Where, however, the aim is not to insure annihilation of the departed, but to secure his well-being, anxiety is shown that the corpse shall be guarded against ill-treatment. This anxiety prompts devices which vary according to the views taken of the deceased’s state of existence.

In some cases security is sought in secrecy, or inaccessibility, or both. Over certain sepulchres the Chibchas planted trees to conceal them. After a time the remains of New Zealand chiefs were “secretly deposited by priests in sepulchres on hill-tops, in forests, or in caves.” The Muruts of Borneo place the bones of their chiefs in boxes on the ridges of the highest hills, St. John tells us; and Ellis says of the Tahitians that sometimes, to prevent the

bones from being stolen, they were deposited on the tops of the most inaccessible mountains. Among the Kaffirs, while the bodies of common people are exposed to be devoured by wolves, those of chiefs are buried in their cattle-pens, and Livingstone tells us that a Bechuana chief is buried "in his cattle-pen, and all the cattle are driven for an hour or two around and over the grave, so that it may be quite obliterated." Still stranger was the precaution taken on behalf of the ruler of Bogota. In preparation for the death of the cazique, certain special attendants, keeping secret the place of their operations, made a very secure resting-place. "They divert," says Simon, "the course of a river, and in its bed make the grave. * * * As soon as the cazique is buried, they let the stream return to its natural course."

While in these cases the desire to hide the corpse and its belongings from enemies, brute and human, predominates, in other cases the desire to protect the corpse against imagined discomfort predominates. We have already noted the means sometimes used to facilitate its breathing, supposed to be still going on; and probably a kindred purpose originated the practice followed by many races of raising the corpse to a height above the ground. Sundry of the Polynesians place dead bodies on scaffolds. In Australia, too, and in the Andaman Islands, the corpse is occasionally thus disposed of. Among the Zulus, while some bury and some burn, others expose in trees; and Dyaks and Kyans have a similar custom. But it is in America, where the natives, as we see, betray in other ways the desire to shield the corpse from pressure, that exposure on raised stages is commonest. Burton tells us that the Dakotahs adopt this method; Morgan states that at one time it was the practice of the Iroquois; Catlin, describing the Mandans as having scaffolds on which "their 'dead live,' as they term it," remarks that they are thus kept out of the way of wolves and dogs, and Schoolcraft asserts the

same of the Chippewas. Among South-American tribes, a like combination of ends was sought by using chasms and caverns as places of sepulture. The Caribs did this. Humboldt tells us that the Guana Indians bury their dead, only in the absence of cavities amid the rocks. The Chibchas interred in a kind of "bobedas" or caves, which had been made for the purpose. And the several modes of treating the dead adopted by the ancient Peruvians, all of them secured, as far as might be, both ends—protection, and absence of supposed inconvenience to the corpse. Where they had not natural clefts in the rocks, they made "great holes and excavations with closed doors before them;" or else they kept the embalmed bodies in temples

Leaving the New World, throughout which the primitive conception of death as a long-suspended animation seems to have been especially vivid, we find elsewhere less recognition of any sensitiveness in the dead to pressure or want of air there is simply a recognition of the need for preventing destruction by animals, or injury by men and demons. This is the obvious motive for covering over the corpse, and, occasionally, the assigned motive. Earth is sometimes not enough, and then additional protection is given. Park says that, by the Mandingoes, "prickly bushes are laid upon" the grave, "to prevent the wolves from digging up the body"; and the Jollofs, a tribe of Coast Negroes, use the same precaution. In other cases, stones are added. The Arabs keep out wild beasts in this way; and very generally we find either stones and earth, or stones alone, which are evidently the most effectual. Crantz tells us that the Esquimaux protect the corpse by heavy stones. The Bodo and Dhimals pile stones "upon the grave to prevent disturbance by jackals," etc. In Damara-land, a chief's tomb consists of a large heap of stones surrounded by thorn-bushes

And now observe a remarkable sequence. The kindred of the deceased, from real or professed affection, and others from fear of what he may do

when his double returns, join in augmenting the protective mass. Park tells us of the Inland Negroes, that in some places large cairns are formed over graves, by passing relatives who continually add stones to the heap, and of certain Central Americans Urrutia says, it is a custom still preserved to throw a handful of earth, or a stone, upon the grave of the distinguished dead, as a tribute to their memory. Obviously, in proportion as the deceased is loved, revered, or dreaded, this process is carried further. Hence, the increasing of the heap for protective purposes, brings about an increasing of it as a mark of power or wealth. Thus, of the Central Americans, Ximenez tells us that they "raised mounds of earth corresponding in height with the importance of the deceased." Of the Chibchas, Cieza says—"they pile up such masses of earth in making their tombs, that they look like small hills", and Acosta, describing certain other burial mounds in those parts as "heaped up during the mourning," adds—"as that extended as long as drink was granted, the size of the tumulus shows the fortune of the deceased." Ulloa makes a kindred remark respecting the monuments of the Peruvians.

So that, beginning with the small mound necessarily resulting from the displacement of earth by the buried body, we come at length to such structures as the Egyptian pyramids the whole series originating in the wish to preserve the body from injuries hindering resuscitation.

§ 88. Another group of customs, having the same purpose, must be named. I refer to the adoption of processes which arrest decay. Along with the belief that reanimation will be prevented if the returning other-self finds a mutilated corpse, or none at all; there goes the belief that to insure reanimation, putrefaction must be stopped. Naturally there arises the inference that if destruction of the corpse by animals prevents revival, decomposition of it may prevent

revival. That this idea leaves no traces among men in very low states, is probably due to the fact that no methods of arresting decomposition have been discovered by them. But among more advanced races, we find proofs that the idea arises and that it leads to action.

Respecting the prompting motive, we have the statement of Herrera concerning certain of the Mexicans, who believed that "the dead were to rise again, and when their bones were dry, they laid them together in a basket, and hung them up to a bough of a tree, that they might not have to look for them at the resurrection." Similarly, the Peruvians, explaining their observances to Garcilasso, said—"We, therefore, in order that we may not have to search for our hair and nails at a time when there will be much hurry and confusion, place them in one place, that they may be brought together more conveniently, and, whenever it is possible, we are also careful to spit in one place."

With such indications to guide us, we cannot doubt the meaning of the trouble taken to prevent decay. When we read that in Africa the Loango people smoke their corpses, and that in America some of the Chibchas "dried the bodies of their dead in barbacoas on a slow fire," we must infer that the aim was to keep the flesh in a state of integrity against the time of resuscitation. And on finding that among these same Chibchas, as also by some of the Mexicans, and by the Peruvians, the bodies of the kings and caziques were embalmed, we must conclude that embalming was adopted simply as a more effectual method of achieving the same end: especially after noting that the preservation was great in proportion as the rank was high, as shown by Acosta's remark that "the body [of Ynca Yupanqui] was so complete and well preserved, by means of a sort of bitumen, that it appeared to be alive."

Evidence that like ideas suggested the like practices of the Egyptians, need not be given.

§ 89. Some further funeral rites, indirectly implying

the belief in resurrection, must be named; partly because they lead to certain customs hereafter to be explained. I have in view the bodily mutilations, etc., which, in so many cases, are marks of mourning.

We read in the *Iliad* that at the funeral of Patroclus, the Myrmidons "covered all the dead body over with hair, which, cutting off, they threw upon it", further, that Achilles placed his shorn-off locks in the hands of the corpse, and that this act went along with the dedication of himself to avenging Patroclus, and with the promise to join him afterward. Hair is thus used as a gage: a portion of the body is given as symbolizing a gift of the whole. And this act of affection, or mode of propitiation, or both, prevails widely among uncivilized races.

As further showing what the rite means, I may begin with the statement of Bonwick, that, by Tasmanian women, "the hair, cut off in grief, was thrown upon the mound;" and may add the fact furnished by Winterbottom, who, respecting the Soosoos, says that one grave was seen—that of a woman—with her eldest daughter's hair placed upon it.

Where we do not learn what becomes of the hair, we yet in numerous cases learn that it is cut off. Among the Coast Negroes a dead man's wives shave their heads, and some Damaras, on the death of a valued friend, do the like. Similarly with the Mpongwe, the Kaffirs, and the Hottentots. In Hawaii and Samoa the hair is cut or torn, the Tongans shave the head; the New Zealanders, in some cases, clip half the head-hair short; among the Tannese "cutting off the hair is a sign of mourning," and on the death of the late Queen of Madagascar, "all the people, with the exception of about twenty of the highest officers, had to cut off their hair." In America it is the same. A Greenland's widow sacrifices her tresses, the near relatives of a dead Chinook cut their hair off, and we find that the Chippeways, the Comanches, the Dakotahs, the Mandans, the Tupis, do the like.

The significance of this rite

as a mark of subordination, and as a propitiation of the presently-reviving dead, is shown by sundry facts. Thus, Shortt tells us that among the Todas, there is a cutting off of the hair at a death, but only "by the younger members to denote their respect for their seniors"; and Burckhardt says of the Arabs that, "on the death of a father, the children of both sexes cut off their * * * tresses of hair in testimony of grief." By South Americans, both political and domestic subordination are thus marked. We learn from Dobrizhoffer that among the Abipones, "on the death of a cacique, all the men under his authority shave their long hair as a sign of grief." So of the Peruvians, Cieza tells us that "the Indians of Llacta-cunya made great lamentations over their dead, and the women who are not killed, with all the servants, are shorn of their hair." That is to say, those wives who did not give themselves wholly to go with the dead, gave their hair as a pledge.

Like in their meanings are the accompanying self-bleedings and mutilations. At funerals, the Tasmanians "lacerated their bodies with sharp shells and stones." The Australians cut themselves, and Cook says the same of the Tahitians and the New Zealanders. Mariner ascribes this custom to the Tongans. We read that among the Greenlanders the men "sometimes gash their bodies;" and that the Chinooks "disfigure their bodies." Schoolcraft testifies that the widows of the Comanches "cut their arms, legs, and bodies in gashes, until they are exhausted by the loss of blood, and frequently commit suicide;" and Burton says the Dakotahs "not unfrequently gash themselves and amputate one or more fingers."

In this last instance we are introduced to the fact that not blood only, but sometimes a portion of the body, is given, where the expression of reverence or obedience is intended to be great. Thus Cook tells us that in Tonga, on the death of a high priest, the first joint on the little finger is amputated; and we learn

from Ellis that, when a king or chief in the Sandwich Islands died, the mutilations undergone by his subjects were—tattooing a spot on the tongue, cutting the ears, or knocking out one of the front teeth. On remembering that blood, and portions of the body, are offered in religious sacrifice; on reading that the Dahomans sprinkle human blood on the tombs of their old kings, to get the aid of their ghosts in war, on finding that the Mexicans gave their idols their blood to drink, that some priests bled themselves daily, and that even male infants were bled; on being told that the like was done in Yucatan, and Guatemala, and San Salvador, and that the coast-people of Peru offered blood alike to idols and on sepulchres; we cannot doubt that propitiation is the original purpose of these funeral rites. It is one of the indirect results of the belief in approaching resuscitation, where it is joined with cannibalism, still practised or previously practised.

That such is the meaning is, indeed, in one case distinctly asserted. Turner tells us that a Samoan ceremony on the occasion of a decease, was “beating the head with stones till the blood runs; and this they called ‘an offering of blood’ for the dead.”

§ 90. All these various observances, then, imply the conviction that death is a long-suspended animation. The endeavours to revive the corpse by ill-usage; the calling it by name, and addressing to it reproaches or inquiries; the endeavours to feed it, and the leaving with it food and drink; the measures taken to prevent its discomfort from pressure and impediments to breathing; the supplying of fire to cook by, or to keep off cold; the care taken to prevent injury by wild beasts, and to arrest decay; and even these various self-injuries symbolizing subordination,—all unite to show this belief. And this belief was avowed.

Thus in Africa, according to Bastian, the Ambamba people think that a man remains “in the state of the dead

three days; some, however, are carried by the fetish into the bush, remaining dead for years in both cases they are brought to life again." Lander, referring to a man dead a few days previously among the Inland Negroes, says "there was a public declaration that his tutelary god had resuscitated him." And Livingstone was thought by a Zambesi chief, to be an Italian, "Siriatomba, risen from the dead" Turning to Polynesia, we find, among the incongruous beliefs of the Fijians, one showing a transition between the primitive idea of a renewed ordinary life, and the idea of another life elsewhere they think that death became universal because the children of the first man did not dig him up again, as one of the gods commanded. Had they done so, the god said all men would have lived again after a few days' interment. And then, in Peru, where so much care was taken of the corpse, resuscitation was an article of faith. Garcilasso says, "the Yncas believed in a universal resurrection—not for glory or punishment, but for a renewal of this temporal life"

Just noting past exhibitions of this belief among higher races—such as the fact that "in Moslem law, prophets, martyrs, and saints are not supposed to be dead their property, therefore, remains their own;" and such as the fact that in Christian Europe, distinguished men, from Charlemagne down to the first Napoleon, have been expected to re-appear; let us note the still existing form of this belief. It differs from the primitive belief less than we suppose. I do not merely mean that in saying "by one man sin entered into the world, and death by sin," the current creed implies that death is not a natural event; just as clearly as do the savage creeds which ascribe death to some difference of opinion among the gods, or disregard of their directions. Nor do I refer only to the further facts that in our State Prayer-Book, bodily resurrection is unhesitatingly asserted, and that poems of more modern date contain detailed descriptions of the dead rising again.

I have in view facts showing that, even still, many avow this belief as clearly as it was lately avowed by a leading ecclesiastic. On July 5th, 1874, the Bishop of Lincoln preached against cremation, as tending to undermine the faith of mankind in a bodily resurrection. Not only, in common with the primitive man, does Dr. Wordsworth hold that the body of each buried person will be resuscitated; but he also holds, in common with the primitive man, that destruction of the body will prevent resuscitation.*

And now observe, finally, the kind of modification through which the civilized belief in resurrection is made partially unlike the savage belief. There is no abandonment of it the anticipated event is simply postponed. Supernaturalism, gradually discredited by science, transfers its supernatural occurrences to remoter places in time or space. As believers in special creations suppose them to happen, not where we are, but in distant parts of the world; as miracles, admitted not to take place now, are said to have taken place during a past dispensation, so, reanimation of the body, no longer expected as immediate, is expected at an indefinitely far-off time. The idea of death differentiates slowly from the idea of temporary insensibility. At first reanimation is looked for in a few hours, or in a few days, or in a few years; and gradually, as death becomes more definitely conceived, reanimation is not looked for till the end of all things.

* Had he been similarly placed, the bishop would doubtless have taken the same course as the Ynca Atahualpa, who turned Christian in order to be hanged instead of burnt, because (he said to his wives and to the Indians) if his body was not burnt, his father, the Sun, would raise him again

CHAPTER XIII.

THE IDEAS OF SOULS, GHOSTS, SPIRITS, DEMONS, ETC.

§ 91. THE traveller Park, after narrating a sudden rencontre with two negro horsemen, who galloped off in terror, goes on to say—"About a mile to the westward, they fell in with my attendants, to whom they related a frightful story. it seems their fears had dressed me in the flowing robes of a tremendous spirit; and one of them affirmed that when I made my appearance, a cold blast of wind came pouring down upon him from the sky, like so much cold water."

I quote this passage to remind the reader how effectually fear, when joined with a pre-established belief, produces illusions supporting that belief; and how readily, therefore, the primitive man finds proof that the dead reappear.

Another preliminary.—A clergyman known to me, accepting in full the doctrine of the natural evolution of species, nevertheless professes to accept literally the statement that "God formed man of the dust of the ground, and breathed into his nostrils the breath of life"—an incongruity of beliefs which may almost pair off with that of the Catholics, who seeing, touching, and tasting the unchanged wafer, nevertheless hold it to be flesh.

These acceptances of irreconcilable conceptions, even by cultivated members of civilized communities, I instance as suggesting how readily primitive men, low in intelligence and without knowledge, may entertain conceptions

which are mutually destructive. It seems difficult to picture them as really thinking that the dead, though buried, come back in tangible shapes. And where they assert that the duplicate goes away, leaving the corpse behind, there appears no consistency in the accompanying supposition that it needs the food and drink they provide, or wants clothing and fire. For if they conceive it as aeriform or ethereal, then how can they suppose it to consume solid food, as in many cases they do literally, and if they regard it as substantial, then how do they conceive it to co-exist with the corpse, and to leave the grave without disturbing its covering?

But after reminding ourselves, as above, of the extremes of credulity and illogicality possible even to educated men of developed races, we shall see reason for concluding that the primitive man's ideas of the other-self, impossible though they look to us, can nevertheless be entertained.

§ 92. Typical as it is, I must set out with the often-cited notion of the Austrahans, so definitely expressed by the condemned criminal who said he should jump up a white-fellow and have plenty of sixpences. Many have heard of the case of Sir George Grey, who was recognized and caressed by an Australian woman as her deceased son come back; and equally illustrative is the case of Mrs. Thomson, who, regarded as the returned other-self of a late member of the tribe, was sometimes spoken of by the Austrahans she lived with as "Poor thing! she is nothing—only a ghost!" Bonwick states that a settler with a bent arm, being identified as a lately-deceased native who had a bent arm, was saluted with—"O, my Bulludee, you jump up white fellow!" And, giving other instances, Bonwick quotes Davis's explanation of this Australian belief, as being that black men, when skinned before eating them, are seen to be white; and that therefore the whites are taken for their ghosts. But a like belief is elsewhere entertained without

this explanation. Turner says the New Caledonians "think white men are the spirits of the dead, and bring sickness." Again, "at Darnley Island, the Prince of Wales' Islands, and Cape York, the word used at each place to signify a white man also means a ghost." We learn from Burton that Krumen call Europeans "the ghost-tribe"; a people in old Calabar call them "spirit-men", and the Mpongwe of the Gaboon call them "ghosts."

The implication, put by these many cases beyond doubt, that the duplicate is at first conceived as no less material than its original, is shown with equal clearness in other ways among other peoples. Thus the Karens say "the Lā [spirit] sometimes appears after death, and cannot then be distinguished from the person himself." The Araucanians think "the soul, when separated from the body, exercises in another life the same functions it performed in this, with no other difference except that they are unaccompanied with fatigue or satiety." "The inhabitants of Quimbaya," Piedrahita says, "acknowledged that there was something immortal in man, but they did not distinguish the soul from the body;" and Herrera asserts the like. The distinct statement of the ancient Peruvians was that "the souls must rise out of their tombs, with all that belonged to their bodies." And, according to Acosta, they joined with this the belief "that the souls of the dead rove about, and feel cold and thirst, and hunger and toil."

Besides being expressed, this belief is implied by acts. The practice of some Peruvians, who scattered "flour of maize, or qumua, about the dwelling, to see, as they say, by the footsteps whether the deceased has been moving about," is paralleled elsewhere: even among the Jews, sifted ashes were used for tracing the footsteps of demons; and by some of them, though not by others, demons were regarded as the spirits of the wicked dead. And a like idea must exist among those Negroes mentioned by Bastian, who put thorns in the paths leading to their villages, to keep away

demons. Elsewhere, the alleged demands for provisions by the dead have the same implication. "Give us some food, that we may eat and set out," say certain Amazulu spirits, who represent themselves as going to fight the spirits of another place. Among the North-American Indians, the spirits are supposed to smoke, and in Fiji, it is said that the gods "eat the souls of those who are destroyed by men"—first *roasting* them. It is also a Fijian belief that some "souls are killed by men" the second self may have to be fought in battle like the first. So, too, by the Amazulu, "it is supposed that the Amatongo, or the dead, can die again. * * * We have allusions to their being killed in battle, and to their being carried away by the river" And this belief in the substantiality of the double, was shared by the ancient Hindus, the Tartars, and by Europeans in old times.

§ 93. The transitions between this original and most crude conception, and the less crude conceptions which come later, cannot be clearly traced; but there are indications of a progressive modification.

Something like a semi-substantiality is implied by the ideas of the Tahitians, described by Ellis as "vague and indefinite." For while they hold that most spirits of the dead are "eaten by the gods," not at once, but by degrees, (implying separability of the parts); they hold that others are not eaten, and sometimes appear to the survivors in dreams. this re-appearance being probably the ground for the inference that they are not eaten. Again, a substantiality that is partial if not complete, is implied by the ascription to ghosts of organs of sense, through which they have ordinary perceptions. The Yakuts leave conspicuous marks to show the spirits where the offerings are left; and, according to Orozco y Berra, the Indians of Yucatan hold "that the soul of the deceased returns to the world, and in order that on leaving the tomb it may not lose the way to

the domestic hearth, they mark the path from the hut to the tomb with chalk." The materiality implied by physical vision, is similarly ascribed by the Nicobar people, who think that the "malignant spirits [of the dead] are effectually prevented from taking their abode again in the village, by a screen made of pieces of cloth, which keeps out of their baneful sight, the place where the houses stand."

The Greek conception of ghosts seems to have been of allied kind. "It is only," says Thurlwall, "after their strength has been repaired by the blood of a slaughtered victim, that they recover reason and memory for a time, can recognize their living friends, and feel anxiety for those they have left on earth." That these dwellers in Hades have some kind of substantiality, is implied both by the fact that they come trooping to drink the sacrificial blood, and by the fact that Ulysses keeps them back with his sword. Moreover, in this world of the dead, he beholds Tityus having his liver torn by vultures, speaks of Agamemnon's soul as "shedding the warm tear," and describes the ghost of Sisyphus as sweating from his efforts in thrusting up the still-gravitating stone. And here I may fitly refer to a passage in the *Iliad*, showing us, in a very clear way, how the primitive notion becomes modified. On awaking after dreaming of, and vainly trying to embrace, Patroclus, Achilles says—"Alas, there is indeed then, even in the dwellings of Hades, a certain spirit and image, but there is no body in it at all." Yet, being described as speaking and lamenting, the ghost of Patroclus is conceived as having the materiality implied by such acts. Thus, in the mind of the Homeric age, the dream, while continuing to furnish proof of an after-existence, furnished experiences which, when reasoned upon, necessitated an alteration in the idea of the other-self. complete substantiality was negated.

Nor do the conceptions which prevailed among the Hebrews appear to have been different. We find ascribed

now substantiality, now insubstantiality, and now something between the two. The resuscitated Christ is at the same time represented as having wounds that admit of tactual examination; and nevertheless as passing unimpeded through a closed door or through walls. And their supernatural beings generally, whether good or bad, and whether revived dead or not, were similarly conceived. Here angels dining with Abraham, or pulling Lot into the house, are described as having complete corporeity; there both angels and demons are spoken of as swarming invisibly in the surrounding air, thus being incorporeal, elsewhere they are said to have wings, implying locomotion by mechanical action, and are represented as rubbing against, and wearing out, the dresses of Rabbins in the synagogue.

Manifestly the stories about ghosts universally accepted among ourselves in past times, involved the same thought. The ability to open doors, to clank chains and make other noises, implies a considerable coherence of substance, and this coherence must have been assumed, however little the assumption was avowed.

For many further illustrations of this belief in semi-substantiality, I may refer the reader to Mr. Tylor's *Primitive Culture*, Vol. I. pp. 455—6 (2nd Ed.)

§ 94. As implied above, we find, mingled with these ideas of semi-substantial duplicates, and inconsistently held along with them, the ideas of aeriform and shadowy duplicates. The contrast between the dying man and the man just dead, has naturally led to a conception of the departed in terms of the difference: each marked difference generating a correlative conception.

The heart ceases to beat. Is then the heart the other-self that goes away? Some races think it is; as shown by Bobadilla's cross-examination of the Indians of Nicaragua. He asks of one—"Do those who go upwards, live there as they do here, with the same body and head and the rest?"

To which the reply is—"Only the heart goes there." And further questioning brings out a confused idea that there are two hearts, and that "that heart which goes is what makes them live." So, too, among the Chancas of ancient Peru, Cieza says, soul "they called *Soncccon*, a word which also means heart."

More conspicuous as the cessation of breathing is than the cessation of the heart's action, it leads to the more prevalent identification of the departed other-self with the departed breath. Among these same Central Americans, this identification co-existed with the last. To one of Bobadilla's questions an Indian replied—"When they are dying, something like a person called *yulio*, goes off their mouth, and goes there, where that man and woman stay, and there it stays like a person and does not die, and the body remains here." That the same idea has been generally held by higher races is too well known to need proof. I will name only the graphic presentation of it in illustrated ecclesiastical works of past times; as in the *Mortilogus*, etc., of the Prior Conrad Rentter, published in 1508, which contains woodcuts of dying men out of whose mouths smaller figures of themselves are escaping, and being received, in one case by an angel, and in another by a devil.

Of direct identifications of the soul with the shadow, there are many illustrations; such as that of the Greenlanders, who, Crantz tells us, "believe in two souls—viz, the shadow and the breath." It will suffice, in further support of ancient examples, to cite the modern example of the Amazulu, as given by Dr Callaway. Looking at the facts from the missionary point of view, and so inverting the order of genesis, he says—"Scarcely anything can more clearly prove the degradation which has fallen on the natives than their not understanding that *isitunzi* meant the spirit, and not merely the shadow cast by the body; for there now exists among them the strange belief that the dead body casts no shadow."

The conceptions of the other-self thus resulting, tending

to supplant the conceptions of it as quite substantial, or half substantial, because less conspicuously at variance with the evidence, lead to observances implying the belief that ghosts need spaces to pass through, though not large ones. Thus the Iroquois leave "a slight opening in the grave for it [the soul] to re-enter;" and in other cases, with the same motive, holes are bored in coffins. Of the Ansayru, Walpole says—"In rooms dedicated to hospitality, several square holes are left, so that each spirit may come or depart without meeting another." And many facts of like meaning are elsewhere met with.

§ 95 Were there no direct evidence that conceptions of the other-self are thus derived, the indirect evidence furnished by language would suffice. This comes to us from all parts of the world, from peoples in all stages.

Describing the Tasmanians, Milligan says—"To these guardian spirits they gave the generic name 'W-arrawah,' an aboriginal term, * * * signifying shade, shadow, ghost, or apparition." In the Aztec and cognate languages, *checcatl* means both wind, soul, and shadow. The New England tribes called the soul *chemung*, the shadow. In Quiché, *natub*, and in Esquimaux, *tarnak*, express both these ideas. And in the Mohawk dialect, *atouritz*, the soul, is from *atourion*, to breathe. Like identities of words have been pointed out in the vocabularies of the Algonquins, the Arawaks, the Abipones, the Basutos. That the speech of the civilized by certain of its words identifies soul with shade, and by others identifies soul with breath, is a familiar fact. I need not here repeat the evidence detailed by Mr. Tylor, proving that both the Semitic and the Aryan languages show the like original conceptions.

§ 96. And now we come to certain derivative conceptions of great significance. Let us take first, the most obvious.

Quadrupeds and birds are observed to breathe, as men

breathe. They have shadows, too, as men have; and these shadows appended to them, follow them and mimic them in like ways. If, then, a man's breath or his shadow is that other-self which goes away at death, the animal's shadow or breath, which also goes away at death, must be its other-self: the animal has a ghost. Even the primitive man, who reasons but a step beyond the facts directly thrust on his attention, cannot avoid drawing this conclusion. Hence we find it avowedly or tacitly embodied in primitive beliefs, and surviving in the beliefs of early civilized races.

The savage in his lowest and most thoughtless stage, stops here; but along with advance in reasoning power there comes perception of a further implication. Though unlike men and familiar animals in not having any perceptible breath (unless, indeed, perfume is regarded as breath), plants are like men and animals in so far that they grow and reproduce. they similarly flourish, decay, and die, after leaving offspring. But plants cast shadows; and as their leaves rustle in the breeze or their branches sway in the gale, their shadows exhibit corresponding agitations. Hence, consistency demands an extension of the belief in duality: plants, too, have souls. This implication, recognized by somewhat advanced races, as the Dyaks, the Karens, and some Polynesians, leads among them to observances by which plant-spirits are propitiated. And it persists in well-known forms through succeeding stages of social evolution.

But this is not all. Having gone thus far, the progressing man, as he becomes more logical, has to go further. For shadows are possessed not by men, animals, and plants only: other things have them. Hence, if shadows are souls, these other things must have souls. And now mark that we do not read of this belief among the very lowest races. It does not exist among the Fuegians, the Australians, the Tasmanians, the Andamanese, the Bushmen; or, if it does, it is not sufficiently pronounced to have drawn

the attention of travellers. But it is a belief that arises in the more intelligent races, and develops. Mason says the Karens think "every natural object has its lord or god, in the signification of its possessor or presiding spirit:" even inanimate things that are useful, such as instruments, have each of them its *Là* or spirit. Describing the notion of souls as existing among the Chippewas, Keating writes.—they "believe that animals have souls, and even that inorganic substances, such as kettles, etc., have in them a similar essence." By the Fijians who, as we have seen (§ 41), are among the most rational of barbarians, this doctrine is fully elaborated. Seemann tells us that they ascribe souls "not only to all mankind, but to animals, plants, and even houses, canoes, and all mechanical contrivances," and this ascription, named also by T. Williams, is considered by him to have the origin here alleged. he says—"probably this doctrine of shadows has to do with the notion of inanimate objects having spirits." Peoples in far more advanced states have drawn the same inference. The Mexicans, according to Peter of Ghent, "supposed that every object had a god;" and that its possession of a shadow was the basis for this supposition, we shall find good reason for thinking on observing the like belief avowedly thus explained by a people adjacent to the Chibchas. Concerning them, Piedrahita writes.—

"The *Laches* worshipped every stone as a god, as they said that they had all been men, and that all men were converted into stones after death, and that a day was coming when all stones would be raised as men. They also worshipped their own shadow, so that they always had their god with them, and saw him when it was daylight. And though they knew that the shadow was produced by the light and an interposed object, they replied that it was done by the Sun to give them gods * * * And when the shadows of trees and stones were pointed out to them, it had no effect, as they considered the shadows of the trees to be gods of the trees, and the shadows of the stones the gods of the stones, and therefore the gods of their gods."

These facts, and especially the last, go far to show that the belief in object-souls, is a belief reached at a certain

stage of intellectual evolution, as a corollary from a pre-established belief respecting the souls of men. Without waiting for the more special proofs to be hereafter given, the reader will see what was meant in § 65 by the denial that the primitive man could have so retrograded to an intelligence below that of brutes, as originally to confuse the animate with the inanimate, and he will see some ground for the accompanying assertion that such confusion of them as his developing conceptions show, he is betrayed into by inference from a natural but erroneous belief previously arrived at.

§ 97. Returning from this parenthetical remark, it will be useful, before closing, to note the various classes of souls and spirits which this system of interpretation originates.

We have, first, the souls of deceased parents and relatives. These, taking in the minds of survivors vivid shapes, are thus distinguished from the souls of ancestors, which, according to their remoteness, pass into vagueness: so giving ideas of souls individualized in different degrees.

We have, next, the wandering doubles of persons who are asleep, or more profoundly insensible. That these are duly recognized as a class, is shown by Schweinfurth's account of the Bongo; who think that old people "may apparently be lying calmly in their huts, whilst in reality they are taking counsel with the spirits of mischief" in the woods.

Further, we have, in some cases, the souls of waking persons which have temporarily left them: instance the belief of the Karens, that "every human being has his guardian spirit walking by his side, or wandering away in search of dreamy adventures; and if too long absent, he must be called back with offerings." The actual recognition of such distinctions is clearly shown us by the Malagasy, who have different names for the ghosts of a living and of a dead person.

Another classification of souls or spirits is to be noted: there are those of friends and those of enemies—those be-

longing to members of the tribe, and those belonging to members of other tribes. Of course these groups are not completely coincident; for there are the ghosts of bad men within the tribe, as well as those of the implacable foes outside of it; and there are in some cases the malignant spirits of those who have remained unburied. But, speaking generally, the good and the bad spirits have these origins; and the amity or the enmity ascribed to them after death, is but a continuance of the amity or enmity shown by them during life.

We must add to these the souls of other things—beasts, plants, and inert objects. Clavigero tells us that the Mexicans ascribe the “blessing of immortality to the souls of brutes”; and the Malagasy think the ghosts “of both men and beasts reside in a great mountain in the south.” But though animal-souls are not uncommonly recognized; and though Fijians and others believe that the souls of destroyed utensils go to the other world; we have not much evidence that souls of these classes are regarded as commonly interfering in human affairs.

§ 98. It remains only to note the progressive differentiation of the conceptions of body and soul, which the facts show us. As, in the last chapter, we saw that, along with the growth of intelligence, the idea of that permanent insensibility we call death, is gradually differentiated from the ideas of those temporary insensibilities which simulate it, till at length it is marked off as radically unlike; so, here, we see that the ideas of a substantial self and an unsubstantial self, acquire their strong contrast by degrees; and that increasing knowledge, joined with a growing critical faculty, determine the change

Thus when the Basutos, led by their conception of the other-self as having substantiality, “think that if a man walks on the river-bank, a crocodile may seize his shadow in the water and draw him in”; we may see that the irrecon-

cilability of their ideas is so great, that advancing physical knowledge must modify them—must cause the other-self to be conceived as less substantial. Or again, if, on the one hand, the Fijian ascribes to the soul such materiality that, during its journey after death, it is liable to be seized by one of the gods and killed by smashing against a stone; and if, on the other hand, he holds that each man has two souls, his shadow and his reflection; it is manifest that his beliefs are so incongruous that criticism must ultimately change them. Consciousness of the incongruity, becoming clearer as thought becomes more deliberate, leads to successive compromises. The second self, originally conceived as equally substantial with the first, grows step by step less substantial: now it is semi-solid, now it is aeriform, now it is ethereal. And this stage finally reached, is one in which there cease to be ascribed any of the properties by which we know existence: there remains only the assertion of an existence that is wholly undefined.

CHAPTER XIV.

THE IDEAS OF ANOTHER LIFE.

§ 99. BELIEF in reanimation implies belief in a subsequent life. The primitive man, incapable of deliberate thought, and without language fit for deliberate thinking, has to conceive this as best he may. Hence a chaos of ideas concerning the after-state of the dead. Among tribes who say that death is annihilation, we yet commonly find such inconsequent beliefs as those of some Africans visited by Schweinfurth, who shunned certain caves from dread of the evil spirits of fugitives who had died in them.

Incoherent as the notions of a future life necessarily are at first, we have here to note their leading traits, and the stages of their development into greater coherence. The belief is originally qualified and partial. In the last chapter we saw that some hold resuscitation to be contingent on the treatment of the corpse, and that destruction of it causes annihilation. Moreover, the second life, if commenced, may be brought to a violent end: the dead man's double may be killed afresh in battle; or may be destroyed on its way to the land of the dead; or may be devoured by the gods. Further, there is in some cases a caste-limitation: in Tonga it is supposed that only the chiefs have souls. Elsewhere, resuscitation is said to depend on conduct and its incidental results. Some races think another life is earned by bravery; as do the Comanches, who anticipate it for good

men—those who are daring in taking scalps and stealing horses. Conversely, according to Erinton, “a mild and unwarlike tribe of Guatemala * * * were persuaded that to die by any other than a natural death, was to forfeit all hope of life hereafter, and therefore left the bodies of the slain to the beasts and vultures.” Or, again, it is contingent on the pleasure of the gods; as among the ancient Aryans, who prayed for another life and made sacrifices to obtain it. And there is in some cases a tacit supposition that the second life is, after a time, ended by a second and final death.

Before otherwise considering the primitive conception of a future life, we will glance at this last trait—its duration.

§ 100 One of the experiences suggesting another life, is also one of the experiences suggesting a limit to it; namely, the appearance of the dead in dreams. Sir John Lubbock has been, I believe, the first to point out this. Manifestly the dead persons recognized in dreams, must be persons who were known to the dreamers, and consequently, the long dead, ceasing to be dreamt of, cease to be thought of as still existing. Savages who, like the Manganjas, “expressly ground their belief in a future life on the fact that their friends visit them in their sleep,” naturally draw the inference that when their friends cease to visit them in their sleep, they have ceased to be. Hence the contrast which Sir John Lubbock quotes from Du Chaillu. Ask a negro “where is the spirit of his great-grandfather, he says he does not know, it is done. Ask him about the spirit of his father or brother who died yesterday, then he is full of fear and terror.” And as we shall hereafter see, when dealing with another question, the evidence furnished by dreams establishes in the minds of the Amazulu, a like marked distinction between the souls of the lately dead and the souls of the long dead, which they think have died utterly.

How the notion of a temporary after-life grows into the notion of an enduring after-life, we must leave unconsidered.

For present purposes it suffices to point out that the notion of an enduring after-life is reached through stages.

§ 101 What is the character of this after-life · here believed in vaguely and in a variable way; here believed in as lasting for a time, here believed in as permanent?

As is implied by sundry of the funeral rites described in a foregoing chapter, the life that goes on after death is supposed to differ in nothing from this life · the wants and pursuits remain as before. The Chinooks assert that at night the dead "awake and get up to search for food." And no doubt it is with a like belief in the necessity for satisfying their material wants, that the Comanches think the "dead are permitted to visit the earth at night, but must return at daylight"—a superstition reminding us of one once current in Europe. Among South American tribes, too, we find evidence that the second life is conceived as an unvaried continuation of the first death being, as the Yucatan Indians say, "merely one of the accidents of life" Thus we learn from Southey that the Tupis buried the dead person in the house "in a sitting posture with food before it; for there were some who believed that the spirit went to sport among the mountains, and returned there to eat and to take rest."

Where the future life is thought of as divided from the present by a more decided break, we still find it otherwise contrasted in little or nothing What is said of the Fijians may be said of others. After death they "plant, live in families, fight, and in short do much as people in this world." Let us note the general agreement on this point.

§ 102. The provisions they count upon, differ from the provisions they have been accustomed to, only in being better and more abundant. The Innuits expect to feast on reindeer-meat; after death the Creek goes where "game is plenty and goods very cheap, where corn grows all the year round and the springs of pure water are never dried up;" the

Comanches look forward to buffaloes always abundant and fat, while the Patagonians hope "to enjoy the happiness of being eternally drunk." The conception differs elsewhere only as the food, etc., differs. The people of the New Hebrides believe that in the next life "the cocoa-nuts and the bread-fruit are finer in quality, and so abundant in quantity as never to be exhausted." Arriaga says that the Peruvians "do not know, either in this life or in the other, any greater happiness than to have a good farm wherefrom to eat and to drink." And pastoral peoples show a kindred adjustment of belief the Todas think that after death their buffaloes join them, to supply milk as before.

Of course, with like food and drink there go like occupations. The Tasmanians expected "to pursue the chase with unwearied ardour and unfailing success" Such North American Indians as the Dakotahs, besides killing unlimited game in their "happy hunting-grounds," anticipate "war with their former enemies." And, reminded as we thus are of the daily fighting and feasting looked forward to in the future life of the Scandinavians, we are shown the prevalence of such ideas among peoples widely divergent in race and habitat. To see how vivid these ideas are, we must recall the observances they entail.

§ 103. Books of travel have familiarized every reader with the custom of burying a dead man's movables with him. This custom elaborates as social development goes through its earlier stages. Here are a few illustrations, joined with constructions we must put upon them.

The dead savage, having to hunt and to fight, must be armed. Hence the deposit of weapons and implements with the corpse. The Tongous races have these, with other belongings, "placed on their grave, to be ready for service the moment they awake from what they consider to be their temporary repose." And with this expressed or unexpressed reason, a like course is followed by the Kalmucks,

the Esquimaux, the Iroquois, the Araucanians, the Inland Negroes, the Nagas, and by tribes, savage and semi-civilized, too numerous to mention. Some of whom, too, recognizing the kindred needs of women and children, bury with women their domestic appliances and with children their toys

The departed other-self will need clothes. Hence the Abipones "hang a garment from a tree near the place of interment, for him [the dead man] to put on if he chooses to come out of the grave;" and hence the Dahomans, along with other property, bury with the deceased "a change of raiment when arriving in dead-land." This providing of wearing apparel (sometimes in the shape of their "best robes" in which they are wrapped at burial, sometimes in the shape of an annual supply of fresh clothes placed upon their skeletons, as among the Patagonians) goes along with the depositing of jewels and other valued things. Often the interment of the deceased's "property" with him is specified generally, as in the case of the Samoyeds, the Western Australians, the Damaras, the Inland Negroes, the New Zealanders. With the dead Patagonians are left "all their property"; with the Nagas, "all the movable property"; with the Guiana people, "the chief treasures which they possessed in life"; with the Papuan of New Guinea, his "arms and ornaments"; with a Peruvian Ynca, "his plate and jewels"; with the Ancient Mexican, "his garments, precious stones," etc ; with the Chibcha, his gold, emeralds, and other treasures. The body of the late Queen of Madagascar "was swathed in nearly 500 silk lambas, in the folds of which twenty gold watches, 100 gold chains, rings, brooches, bracelets, and other jewellery, together with 500 gold coins, were rolled." By the Mishmis, all the things "necessary for a person whilst living are placed in a house built over the grave" And Burton says that in Old Calabar, a house is built on the beach to contain the deceased's property, "together with a bed, that the ghost may not sleep upon the floor." To such an extent is this

provision for the future life of the deceased carried, as, in many cases, to entail great evil on the survivors. Concerning some Gold Coast tribes, Beecham says, "a funeral is usually absolute ruin to a poor family." Low states that the Dyaks, besides the deceased's property, "bury with him sometimes large sums of money, and other valuables; so that a father who has been unfortunate in the death of many of his family, is frequently reduced to poverty" And among some extinct societies of America, nothing but the deceased's land, which they were unable to put into his grave, remained for his widow and children.

Carrying out consistently this conception of the second life as a repetition of the life temporarily suspended at death, uncivilized peoples infer that, not only his inanimate possessions, but also his animate possessions, will be needed by the deceased. Hence the slaughter of his live stock. With the Kirghiz chief are deposited "his favourite horses," as also with the Yakut, the Comanche, the Patagonian; with the Borghoo, his horse and dog; with the Bedouin, his camel; with the Damara, his cattle, with the Toda, "his entire herd," and the Vatean, when about to die, has his pigs first tied to his wrist by a cord and then killed. Obviously the skulls of animals in so many cases placed round the grave, show the number which the deceased has taken with him to serve him in his second life. Where the life led here, instead of being predatory or pastoral, is agricultural, the same idea prompts a kindred practice. Tschudi tells us that in Peru "a small bag with cocoa, maize, quinoa, etc., is laid beside the dead, that they might have where-withal to sow the fields in the other world"

§ 104. Logically developed, the primitive belief implies something more—it implies that the deceased will need not only his weapons and implements, his clothing, ornaments, and other movables, together with his domestic animals; but also that he will want human companionship and

services. The attendance he had before death, must be renewed after death.

Hence the immolations, more or less extensive, which have prevailed, and still prevail, so widely—the sacrificings of wives, of slaves, of friends. Too familiar a truth to require illustration, I will here advert only to the further truth that this practice develops as society advances through its earlier stages, and the theory of another life becomes more definite.

Among the Fuegians, the Andamanese, the Australians, the Tasmanians, with their rudimentary social organizations, the sacrifice of wives to accompany dead husbands, if it occurs at all, is not general enough to be specified in the accounts given of them. But it is a practice shown us by more advanced peoples: in Polynesia, by the New Caledonians, by the Fijians, and occasionally by the less barbarous Tongans—in America, by the Chinooks, the Caribs, the Dakotahs—in Africa, by the Congo people, the Inland Negroes, the Coast Negroes, and most extensively by the Dahomans.

To attend the dead in the other world, captives taken in war are sacrificed by the Caribs, the Dakotahs, the Chinooks; and without enumerating the savage and semi-savage peoples who do the like, I will only further instance the survival of the practice among the Homeric Greeks, when slaying (though with another assigned motive) twelve Trojans at the funeral pyre of Patroclus. Similarly with domestics: a dead man's slaves are slain by the Kyans, and by the Milanans of Borneo; the Zulus kill a king's valets; the Inland Negroes kill his eunuchs to accompany his wives; the Coast Negroes poison or decapitate his confidential servants.

Further, there is in some cases an immolation of friends. In Fiji, a leading man's chief friend is sacrificed to accompany him; and in the sanguinary societies of tropical Africa, a like usage is found.

It was, however, in the considerably-advanced societies of ancient America that arrangements for the future conveni-

ence of the dead were carried out with the greatest care. In Mexico, every great man's chaplain was slain to perform for him the religious ceremonies in the next life as in this. Ximenez tells us, concerning the Indians of Vera Paz, that "when a lord was dying, they immediately killed as many slaves as he had, that they might precede him and prepare the house for their master." Besides other attendants, the Mexicans, according to Clavigero, "sacrificed some of the irregularly-formed men, whom the king had collected in his palaces for his entertainment, in order that they might give him the same pleasure in the other world." Of course, such elaborate precautions that the deceased should not lack hereafter any advantages he had enjoyed here, entailed enormous bloodshed. By the Mexicans "the number of the victims was proportioned to the grandeur of the funeral, and amounted sometimes, as several historians affirm, to 200," and in Peru, when an Ynca died, "his attendants and favourite concubines, amounting sometimes, it is said, to a thousand, were immolated on his tomb."

The intensity of the faith prompting such customs, we shall the better conceive on finding proof that the victims are often willing, and occasionally anxious, to die. Among the Guaranis, in old times, some faithful followers "sacrificed themselves at the grave of a chief." Garcilasso says that a dead Ynca's wives "volunteered to be killed, and their number was often such that the officers were obliged to interfere, saying that enough had gone at present," and according to Cieza, "some of the women, in order that their faithful service might be held in more esteem, finding that there was delay in completing the tomb, would hang themselves up by their own hair, and so kill themselves." Similarly of the Chibchas, Simon tells us that with a corpse "they interred the wives and slaves who most wished it." In Africa it is the same. Among the Yorubans, at the funeral of a great man, not only are slaves slain, but "many of his friends swallow poison," and are entombed

with him. Formerly in Congo, "when the king was buried a dozen young maids leapt into the grave * * * and were buried alive to serve him in the other world. These maids were then so eager for this service to their deceased prince, that, in striving who should be first, they killed one another." And in Dahomey, "immediately the king dies, his wives begin to destroy all his furniture and things of value, as well as their own; and to murder one another. On one occasion 285 of the women were thus killed before the new king could stop it."*

Respecting these immolations, it should be added that they sometimes follow the deaths of the young. Kane says a Chinook chief wished to kill his wife, that she might accompany his dead son to the other world; and in Aneiteum, on the death of a beloved child, the mother, aunt, or grandmother, is strangled to accompany it to the world of spirits.

As further qualifying the interpretation to be put on sanguinary customs of this kind, we must bear in mind that not only are inferiors and dependents sacrificed at a funeral, with or without their assent, but that superiors themselves in some cases decide to die. Fiji is not the only place where people advancing in years are buried alive by their dutiful children: the like practice holds in Vate, where an old chief requests his children to destroy him in this way.

§ 105. Conceived as like the first in its needs, and occupations, and pleasures, the second life is conceived as like the first in its social arrangements. Subordination, both domestic and public, is expected to be the same hereafter as here. A few specific statements to this effect may be added to the foregoing implications.

Cook states that the Tahitians divided the departed into

* We have here a clue to the anomalous fact that, in sundry of these African kingdoms, everything is given over to plunder and murder after a king's death. The case of Ashantee, where the relatives of the king commit the destruction, shows us that it is all a sequence of the supposed duty to go and serve the king in another life.

classes similar to those existing among themselves ; or, as Ellis re-states it, "those who were kings or Areois in this world were the same there for ever." The creed of the Tongans, too, represents deceased persons as organized after the system of ranks existing in Tonga. The same holds in Fiji, where it "is most repugnant to the native mind" that a chief should appear in the other world unattended. In the future life, the Chibchas thought they would "be attended to by their servants, as in the present." So, too, is it among the Hill-tribes of India. the heaven of the Karens "has its rulers and its subjects ;" and in the Kookie heaven, the ghost of every enemy a man has slain becomes his slave. With the African races the like holds. Forbes tells us that in the creed of the Dahomans, classes are the same in the second life as in the first. Describing the Kaffir-beliefs, Shooter says, the political and social relations after death are supposed to remain as before. And a kindred conception is implied among the Akkra Negroes, by their assertion that in the rainy season, their guardian gods go on a visit to the court of the supreme god

That this analogy persists in the conceptions of higher races, scarcely needs saying. The legend of the descent of Ishtar, the Assyrian Venus, shows us that the residence of the Assyrian dead had, like Assyria, its despotic ruler, with officers levying tribute. So, too, in the underworld of the Greeks. We have the dread Aides, with his wife Persephone, as rulers ; we have Minos "giving laws to the dead, sitting down, but the others around him, the king, pleaded their causes" ; and to Achilles, described as honoured "when alive equally with the gods," it is said, "now again, when thou art here, thou hast great power amongst the deceased." And while departed men are thus under political and social relations like those of living men, so are the celestials. Zeus stands to the rest "exactly in the same relation that an absolute monarch does to the aristocracy of which he is the head." Nor did the

Hebrew ideas of another life fail to yield like analogies * Originally appearing to mean simply the grave, or in a vague way, the place or state of the dead, Sheol, when acquiring the more definite meaning of a miserable place for the dead—a Hebrew Hades—and afterwards developing into a place of torture, Gehenna, introduces us to a form of diabolical government having gradations. And though, as the conception of life in the Hebrew heaven elaborated along with the elaboration of Hebrew life on earth, the ascribed arrangements did not, like those of the Greeks, parallel terrestrial arrangements domestically, they did politically. As some commentators express it, there is implied a “court” of celestial beings—a hierarchy of angels and others, having ranks and functions. Sometimes, as in the case of Ahab, God is represented as taking council with his attendants and accepting a suggestion. There is a heavenly army, spoken of as divided into legions. An apportioning of powers is described. There are archangels set over different elements and over different peoples: these deputy-gods being, in so far, analogous to the minor gods of the Greek Pantheon. The chief difference, beyond that of origin, is that the powers are more distinctly deputed, and the subordination greater. Though here, too, the subordination is incomplete we read of wars in heaven, and of rebellious angels cast down to Tartarus. That this parallelism continued down into late Christian times, is abundantly shown. In 1407, Petit, professor of theology in the University of Paris, represented God as a feudal sovereign, Heaven as a feudal kingdom, and Lucifer as a rebellious vassal. “He deceived numbers of angels, and brought them over to his party, so that they were to do him

* The primitive Hebrew ideas about the state after death, were probably like those found to exist among many uncivilized peoples, who, though without avowed beliefs in a future life, yet stand in great fear of the spirits of the dead. That the Hebrews believed in ghosts is clear, and out of this belief in ghosts, at first regarded as temporarily existing, there was eventually developed among them, as among other peoples, the belief in a permanent future life.

homage and obedience, as to their sovereign lord, and be no way subject to God, and Lucifer was to hold his government in like manner to God, and independent of all subjection to him. * * * St. Michael, on discovering his intentions, came to him, and said that he was acting very wrong," etc. "A battle ensued between them, and many of the angels took part on either side, but the greater number were for St. Michael" (See *Monstelet*, bk 1., ch. 39) That a kindred view was held by our Protestant Milton, is obvious.

§ 106. Along with this parallelism between the social systems of the two lives, may fitly be named the closeness of communion between them. The second life is originally allied to the first by frequency and directness of intercourse. Thus, in Dahomey, the constant immolations are due to the facts that "they periodically supply the departed monarch with fresh attendants in the shadowy world," and that, "whatever action, however trivial, is performed by the King, it must dutifully be reported to his sire in the shadowy realm." Among the Kaffirs, again, the system of appeal from subordinates to superiors, is so extended as to include those who have passed into the other-life "the departed spirit of a chief being sometimes invoked to compel a man's ancestors to bless him." And along with this may be named the still stranger instance—the extension of trading transactions from the one life into the other: money being borrowed "in this life, to be repaid with heavy interest in the next."

In this respect, as in other respects, the conceptions of civilized races have but slowly diverged from those of savage races. On reading that when tribes of the Amazulu are at enmity, the ancestral spirits of the one tribe go to fight those of the other, we are reminded of the supernatural beings who, siding some with Greeks and some with Trojans, joined in the combat, and we are also reminded that the Jews thought "the angels of the nations fought in heaven

when their allotted peoples made war on earth." Further, we are reminded that the creed of Christendom, under its more widely diffused form, implies a considerable communion between those in the one life and those in the other. The living pray for the welfare of the dead; and the canonized dead are asked to intercede on behalf of the living.

§ 107. The second life, being originally conceived as repeating the first in other respects, is originally conceived as repeating it in conduct, sentiments, and ethical code.

According to the Thibetan cosmogony, the gods fought among themselves. The Fijian gods "are proud and revengeful, and make war, and kill and eat each other, and are, in fact, savages like themselves." They glory in the names of "the adulterer," "the woman-stealer," "the brain-eater," "the murderer." And the ghost of a Fijian chief, on arriving in the other world, recommends himself by the boast—"I have destroyed many towns, and slain many in war." This parallelism between the standards of conduct in the two lives, typical as it is of parallelisms everywhere repeated in lower stages of progress, reminds us of like parallelisms in the standards of those early races whose literatures have come down to us.

Of the after-life of the departed Greeks, under its ethical aspect, the traits are but indistinct. Such as we may perceive, however, conform to those of Greek daily life. In Hades, Achilles thinks of vengeance, and rejoices in the account of his son's success in battle, and the slaughter of his enemies; Ajax is still angry because Ulysses defeated him; and the image of Hercules is described as going about threateningly, frightening the ghosts around him. In the upper world it is the same. "the struggle on earth is only the counterpart of the struggle in heaven." Mars is represented as honoured by the titles of "man-slayer," and "blood-stainer." Jealousy and revenge are ruling motives.

Tricking each other, the immortals also delude men by false appearances—even combine, as Zeus and Athene did, to prompt the breaking of treaties solemnly sworn to. Easily offended and implacable, they are feared just as his demons are feared by the primitive man. And the one act sure to be resented, is disregard of observances that express subordination. As among the Amazulu at the present time, the anger of ancestral spirits is to be feared only when they have not been duly lauded, or have been neglected when oxen were killed; as among the Tahitians “the only crimes that were visited by the displeasure of their deities were the neglect of some rite or ceremony, or the failing to furnish required offerings;” so the ascribed character of the Olympians is such that the one unforgivable offence is failure in acts of propitiation. Nevertheless, it is to be noted that the unredeemed brutality implied by the stories of the earlier gods, is, in the stories of the later, considerably mitigated. Displaying the alleged congruity between the ethical code of this life, and that attributed to beings in another life (whether regarded as departed spirits or not) the conduct of the Greek deities narrated in the *Iliad*, exhibits a play of higher motives proportionate to the play of higher motives shown in the conduct of the Homeric Greeks themselves.

Nor in the ascribed moral standard of the Hebrew other-life, so far as we can infer it from the conduct which is represented as having divine approval, do we fail to see a kindred similarity, if a less complete one. Subordination is still the supreme virtue. If this is displayed, wrong acts are condoned, or are not supposed to be wrong. The obedient Abraham is applauded for his readiness to sacrifice Isaac. there is no sign of blame for so readily accepting the murderous suggestion of his dream as a dictate from heaven. The massacre of the Amalekites by divine command, is completed without check by the merciless Samuel; and there is tacit condemnation of the more merciful Saul.

But though the God of the Hebrews is represented as hardening Pharaoh's heart, and as sending a lying spirit to deceive Ahab through his prophets, it is to be noted that the implied ethical codes of heaven and paradise, while reflecting the code of a people in some respects barbarous, reflect the code of a people in other respects morally superior. Justice and mercy enter into the moral standards of both lives (as expressed by the prophets, at least), in a degree not shown us in the moral standards of lower peoples.

§ 108. And here we are introduced to the fact remaining to be noted—the divergence of the civilized idea from the savage idea. Of course, the primitive conception of the second life as a resumption of the first, becomes less acceptable as accumulating knowledge and clearer thought render its incongruities more appreciable, and hence result modifications. Let us glance at the chief contrasts.

The complete materiality of the second life as originally conceived, following necessarily from the conception of the other-self as quite substantial, the foregoing evidence clearly shows us. Somehow keeping himself out of sight, the deceased eats, drinks, hunts, and fights as before. How material his life is supposed to be, we see in such facts as that, among the Kaffirs, a deceased's weapons are "broken or bent lest the ghost, during some midnight return to air, should do injury with them," and that an Australian cuts off the right thumb of his slain enemy, that his ghost may be unable to throw a spear.

But the destruction of the body by burning or otherwise, tending to produce a qualified notion of the revived other-self, tends to produce a qualified notion of the other-life, physically considered—strengthens that idea of a less substantial other-self, which certain dream-experiences suggest, and generates the idea of a less substantial other-life. The rise of this qualified idea we may see in the practice of burning or otherwise destroying the things intended for the dead man's

use We have already noted cases (§ 84) in which food placed with the corpse is burnt along with it; and elsewhere, in pursuance of the same idea, the property is burnt. In Africa this is common among the Koosas the widows of chiefs "burn all the household utensils"; the Bagos (Coast Negroes) do the like, and include all their stores of food. "even their rice is not saved from the flames." It is a custom of the Comanches to burn the deceased's weapons. In other cases the dead man's implements and movables are broken. Franklin says of the Chippewayans, "no article is spared by these unhappy men when a near relative dies, their clothes and tents are cut to pieces, their guns broken, and every other weapon rendered useless" Obviously the implication is that the ghosts of these possessions go with the deceased; and the accompanying belief that the second life is physically unlike the first, is in some cases expressed. it is said that the essences of the offerings made are consumed by departed souls and not the substances of them.

More decided still seems to be the conceived contrast indicated by the strange practice of destroying models of the deceased's possessions. This practice, prevailing among the Chinese, was lately afresh witnessed by Mr. J. Thomson; who, in his *Straits of Malacca, etc*, describes two lamenting widows of a deceased mandarin whom he saw giving to the flames "huge paper-models of houses and furniture, boats and sedans, ladies-in-waiting and gentlemen-pages" Clearly another life in which the burnt semblances of things are supposed to be useful, must be figured as of a very shadowy kind.

The activities and gratifications of the second life, originally conceived as identical with those of the first, come in course of time to be conceived as more or less unlike them. Besides seeing that at first the predatory races look forward to predatory occupations carried on more successfully, and that races living by agriculture expect to plant and reap as before, we see that even where there is reached

the advanced social state implied by the use of money, the burial of money with the body shows the belief that there will be buying and selling in the second life; and where sham coins made of tinsel are burnt, there remains the same implication. But parallelism passes into divergence. Without trying to trace the changes, it will suffice if we turn at once to the current description of a hereafter, in which the daily occupations and amusements find no place, and in which there is neither marrying nor giving in marriage. Still, being conceived as a life in which all the days are Sundays, passed "where congregations ne'er break up," it is conceived as akin to a part of the present life, though not to the average of it.

Again, the supposed form of social order becomes partially unlike the known form. Type of government, caste distinctions, servile institutions, are originally transferred from the experiences here to the imaginations of the hereafter. But though in the conceptions entertained by the most civilized, the analogy between the social orders of the first and the second lives does not wholly disappear, the last deviates a good deal from the first. Though the gradations implied by a hierarchy of archangels, angels, etc., bear some relation to the gradations seen around us; yet they are thought of as otherwise based. Such inequalities as are imagined have a different origin.

Similarly respecting the ethical conceptions and the implied sentiments. Along with the emotional modifications that have taken place during civilization, there have gone great modifications in the beliefs respecting the code of conduct and measure of goodness in the life to come. The religion of enmity, which makes international revenge a duty and successful retaliation a glory, is to be wholly abandoned; and the religion of amity to be unqualified. Still, in certain respects the feelings and motives now dominant are to remain dominant. The desire for approbation, which is a ruling passion here, is represented as being a ruling passion

hereafter. The giving of praise and receiving of approval are figured as the chief sources of happiness.

Lastly, we observe that the two lives become more widely disconnected. At first perpetual intercourse between those in the one and those in the other, is believed to be going on. The savage daily propitiates the dead; and the dead are supposed daily to aid or hinder the acts of the living. This close communion, persisting throughout the earlier stages of civilization, gradually becomes less close. Though by paying priests to say masses for departed souls, and by invocations of saints for help, this exchange of services has been, and still continues to be, generally shown, yet the cessation of such practices among the most advanced, implies a complete sundering of the two lives in their thoughts.

Thus, then, as the idea of death gets gradually marked off from the idea of suspended animation; and as the anticipated resurrection comes to be thought of as more and more remote; so the distinction between the second life and the first life, grows, little by little, decided. It diverges by becoming less material; by becoming more unlike in its occupations, by having another kind of social order; by presenting gratifications more remote from those of the senses, and by the higher standard of conduct it assumes. And while thus differentiating in nature, the second life separates more widely from the first: communion decreases, and there is an increasing interval between the ending of the one and the beginning of the other.

CHAPTER XV.

THE IDEAS OF ANOTHER WORLD.

§ 109. WHILE describing in the last chapter, the ideas of another life, I have quoted passages which imply ideas of another world. The two sets of ideas are so closely connected, that the one cannot be treated without occasional reference to the other. I have, however, intentionally reserved the second for separate treatment, both because the question of the locality in which another life is supposed to be passed, is a separate question, and because men's conceptions of that locality undergo modifications which it will be instructive to trace in their order and their causes.

We shall find that by a process akin to the processes lately contemplated, the place of residence for the dead diverges slowly from the place of residence for the living.

§ 110. Originally the two coincide. The primitive doctrine of souls, obliges the savage to think of his dead relatives as close at hand. If he renews the supplies of food at their graves, and otherwise propitiates them, the implication is that they are not far away, or that they will presently be back. This implication he accepts.

Ellis tells us that the Sandwich Islanders think "the spirit of the departed hovers about the places of its former resort;" and in Madagascar, the ghosts of ancestors are supposed to frequent their tombs. Bernau tells us of the Guiana tribes, that they suppose "every place is haunted

where any have died." So, too, is it throughout Africa. On the Gold Coast, according to Cruickshank, "the spirit is supposed to remain near the spot where the body has been buried", and the East Africans "appear to imagine the souls to be always near the places of sepulture" Nay, this assumed identity of habitat is, in some cases, even closer Livingstone says that in the country north of the Zambesi, "all believe that the souls of the departed still mingle among the living, and partake in some way of the food they consume" So, likewise, according to Bastian, "on the Aleutian Islands the invisible souls or shades of the departed wander about among their children"

Certain funeral customs lead to the belief in a special place of residence near at hand; namely, the deserted house or village in which the deceased lived. The Kamtschadales "frequently remove to some other place when any one has died in the hut, without dragging the corpse along with them" Among the Lepchas, the house where there has been a death "is almost always forsaken by the surviving inmates" The motive, sufficiently obvious, is in some cases assigned. If a deceased Creek Indian "has been a man of eminent character, the family immediately remove from the house in which he is buried, and erect a new one, with a belief that where the bones of their dead are deposited, the place is always attended by goblins." Various African peoples have the same practice. In Balonda, a man abandons the hut and garden where a favourite wife has died; and if he revisits the place, "it is to pray to her or make an offering" In some cases a more extensive desertion takes place. Kolben says that the Hottentots remove their kraal "when an inhabitant dies in it." Concerning the Boobies of Fernando Po, Bastian tells us that when a person dies they forsake the village. And in Thompson's account of the Bechuanas, we read that "on the death of Mallahawan, the town [Lattakoo] was removed, according to the custom of the country."

In these cases the consistency is complete. From the other primitive ideas we have traced, arises this primitive idea that the second life is passed in the locality in which the first life was passed.

§ 111. Elsewhere we trace small modifications: the region said to be haunted by the souls of the dead, becomes wider. Though they revisit their old homes, yet commonly they keep at some distance

In New Caledonia, "the spirits of the departed are supposed to go to the bush"; and Turner says that "in Samoa, spirits were supposed to roam the bush." We find, with a difference, this belief among some Africans. The Coast Negroes think there are wild people in the bush who summon their souls to make slaves of them; and the notion of the Bulloms is that the inferior order of demons reside in the bush near the town, and the superior further off.

In other cases the world of the dead, still near at hand, is an adjacent mountain. The genesis of this belief is clear. The Caribs buried their chiefs on hills, the Comanches on "the highest hill in the neighbourhood;" the Patagonians, too, Fitzroy says, interred on the summits of the highest hills; and in Western Arabia, according to Burckhardt, the burial grounds "are generally on or near the summits of mountains." This practice and the accompanying belief, have sometimes an unmistakable connexion. We saw that in Borneo they deposit the bones of their dead on the least accessible peaks and ridges. Hence the Hill-Dyaks' belief, given by Low, that the summits of the higher hills are peopled with spirits; or, as St John says, "with regard to a future state the (Land) Dyaks point to the highest mountain in sight as the abode of their departed friends." In many more places there are mountain other-worlds. Ellis tells us that in Tahiti, "the heaven most familiar * * * was situated near * * * glorious Tamahani, the resort of departed spirits, a celebrated mountain on the north-west side

of Raiatea." As we lately saw (§ 97), a like belief prevails in Madagascar. And I may add the statement quoted by Sir John Lubbock from Dubois, that the "seats of happiness are represented by some Hindu writers to be vast mountains on the north of India "

One more adjacent habitat for the departed must be named. Where caves are used for interments, they become the supposed places of abode for the dead, and hence develops the notion of a subterranean other-world. Ordinary burial, joined with the belief in a double who continually wanders and returns to the grave, may perhaps suggest an idea like that of the Khonds, whose divinities [ancestral spirits] are all confined to the limits of the earth. "within it they are believed to reside, emerging and retiring at will." But, obviously, cave-burial tends to give a more developed form to this conception. Professor Nilsson, in his *Stone Age*, after pointing out how the evidence yielded by remains in caves verifies the traditions and allusions current throughout Europe and Asia, after referring to the villages of artificial mountain-caves, which men made when they became too numerous for natural caves; and after reminding us that along with living in caves there went burial in caves; remarks that "this custom, like all religious customs, * * * survived long after people had commenced to inhabit proper houses." This relation of practices, traceable in many parts of the globe, is especially conspicuous in America, from Terra del Fuego northward to Mexico, as indicated in § 87. And along with it we find, in sundry cases, the conception of an under-ground region to which the dead betake themselves. As, for instance, among the Patagonians; who believe "that some of them after death are to return to those divine caverns where they were created, and where their particular deity resides."

§ 112. To understand fully the genesis of this last belief, we must, however, join with it the genesis of the belief in

more distant localities inhabited by the departed. What changes the idea of another world close at hand, to the idea of another world comparatively remote? The answer is simple—migration.

On considering the forms which dreams are likely to take among those who have lately migrated, we shall see that there will arise beliefs in future abodes which the dead reach by long journeys. Having attachments to relatives left behind, and being subject to home-sickness (sometimes in an extreme degree, as shown by Livingstone's account of some negroes who died from it), uncivilized men, driven by war or famine to other habitats, must often dream of the places and persons they have left. Their dreams, narrated and accepted in the original way as actual experiences, make it appear that during sleep they have been to their old abodes. Now one and now another dreams thus rendering familiar the notion of visiting the father-land during sleep. What, then, happens at death; interpreted as it is by the primitive man? The other-self is long absent—where has he gone? Obviously to the place which he often went to, and from which at other times he returned. Now he has not returned. He longed to go back, and frequently said he would go back. Now he has done as he said he would.

This interpretation we meet with everywhere in some cases definitely stated, and in others unmistakably implied. Among the Peruvians, when an Ynca died, it was said that he "was called home to the mansions of his father the Sun." Lewis and Clarke tell us that "when the Mandans die they expect to return to the original seats of their forefathers." "Think not," said a New Zealand chief, "that my origin is of the earth. I come from the heavens, my ancestors are all there, they are gods, and I shall return to them." If the death of a Santal occurs at a distance from the river, a kinsman brings some portion of him "and places it in the current, to be conveyed to the far-off eastern land from

which his ancestors came " an avowed purpose which, in adjacent regions, dictates the placing of the entire body in the stream. Similarly, it is alleged that "the Teutonic tribes so conceived the future as to reduce death to a 'home-going'—a return to the Father." Let us observe how the implications of this belief correspond with the facts.

Migrations have been made in all directions, and hence, on this hypothesis, there must have arisen many different beliefs respecting the direction of the other world. These we find. I do not mean only that the beliefs differ in widely-separated parts of the world. They differ within each considerable area; and often in such ways as might be expected from the probable routes through which the habitats were reached and in such ways as to agree with traditions.

Thus in South America the Chonos, according to Snow, "trace their descent from western nations across the ocean," and they anticipate going in that direction after death. Of the adjacent Araucanians, Thomson tells us that "after death they go towards the west beyond the sea." The Peruvians of the dominant race, expecting to go to the east, turned the face of the corpse to the east, but not so those of the inferior aboriginal race living on the coast. The paradise of the Ottomacks of Guiana, is in the west; while that of the Central Americans was "where the sun rises." In North America the Chinooks, inhabiting high latitudes, have their heaven in the south, as also have the Chippewas; while the tribes inhabiting the more southerly parts of the continent, have their "happy hunting-grounds" in the west. Again, in Asia the paradise of the Kalmucks is in the west; that of the Kookies in the north, that of the Todas "where the sun goes down." And there are like differences among the beliefs of the Polynesian Islanders. In Eromanga "the spirits of the dead are supposed to go eastward"; while in Lifu, "the spirit is supposed to go westward at death, to a place called Locha."

As is shown by one of the

above cases, the position of the corpse has reference, obviously implied and in some cases avowed, to the direction the dead are supposed to take. Thus Smith tells us that by the Araucanians, the body is placed sitting with the face turned toward the west—the direction of the spirit-land. Andersson says the Damaras place the corpse with the face toward the north, “to remind them (the natives) whence they originally came”; and the corpses of the neighbouring Bechuanas are made to face in the same direction.

Along with these conceptions, differing as do the different antecedents of these migrating tribes, there go different ideas of the journey to be taken after death, with correspondingly-different preparations for it. There is the journey to an under-world; the journey over land; the journey down a river, and the journey across the sea. Each of these has its attendant ideas and observances.

As said above, the descent from troglodytes, alike shown by remains and surviving in traditions, generates a group of beliefs respecting man's origin; and (when joined with this expectation of returning at death to the ancestral home) a further group of beliefs respecting the locality of the other world. “At least one-half of the tribes in America represent that man was first created under the ground, or in the rocky caverns of the mountains,” says Cathn. This is a notion which could scarcely fail to arise among those whose forefathers dwelt in caves. Without knowledge, or power of thought, and having no language capable of expressing the difference between begetting and creating, their traditions will inevitably represent them as having been made in caves, or, more vaguely, as having come out of the earth. According as the legends remain special (which they are likely to do where the particular caves once inhabited are in the neighbourhood) or become general (which they are likely to do where the tribe migrates to other regions) the belief may assume the one or the other form. In the one case there will arise stories such as that

current in the Basuto-country, where there is a cavern whence the natives say they all proceeded; or such as that named by Livingstone concerning a cave near the village of Sechele, which is said to be "the habitation of the Deity." In the other case there will arise such ideas as those still existing among the Todas, who think of their ancestors as having risen from the ground, and such ideas as those of the ancient historic races, who regarded "mother Earth" as the source of all beings. Be this as it may, however, we do actually find along with the belief in a subterranean origin, the belief in a subterranean world, where the departed rejoin their ancestors. Without dwelling on the effects produced in primitive minds by such vast branching caverns as the Mammoth-cave of Kentucky, or the cave of Bellamar in Florida, it suffices to remember that in limestone-formations all over the globe, water has formed long ramifying passages (in this direction bringing the explorer to an impassable chasm, in that to an under-ground river, and in others to narrow crevices) to see that the belief in an indefinitely-extended under-world is almost certain to arise. On recalling the credulity shown by our own rustics in every locality where some neighbouring deep pool or tarn is pointed out as bottomless, it will be manifest that caves of no great extent, remaining unexplored to their terminations, readily come to be regarded as endless—as leading by murky ways to gloomy infernal regions. And where any such cave, originally inhabited, was then or afterwards used for purposes of sepulture, and was consequently considered as peopled by the souls of ancestors, there would result the belief that the journey after death to the ancestral home, ended in a descent to Hades.*

* A confirmation has been pointed out to me since the above passage was put in type. If with the primitive Hebrew practice of cave-burial (shown by Abraham's purchase) we join the fact that *Sheol* literally means "cave," we may infer that along with development of the ghost into a permanently-existing soul, there went development of the cave into an under-world.

Where the journey thus ending, or otherwise ending, is a long one, fit preparations have to be made. Hence one use for the things left with the corpse—hence the club put into the hand of the dead Fijian to be ready for self-defence, hence the spear-thrower fastened to the finger of the deceased New Caledonian, hence the “hell-shoon” provided by the Scandinavians; hence the sacrificed horse or camel on which to pursue the weary way; hence the passports by which the Mexicans warded off some of the dangers, hence the dog’s head laid by the Esquimaux on the grave of a child to serve as a guide to the land of souls, hence the ferry-money, and the presents for appeasing the demons met

Of course, a certain family-likeness among alleged difficulties of this return-journey after death, is to be expected where the migrations have had similar difficulties. Bosman tells us that the heaven of the Gold Coast Negroes, is an “inland country called Bosmanque” a river having to be crossed on the way. This crossing a river is naturally a leading event in the description of the journey, among continental peoples. An overland migration can rarely have occurred without some large river being met with. Having no boats with them, the passing of such a river will, in the surviving tradition, figure as a chief obstacle overcome; and the re-passing it will be regarded as a chief obstacle on the journey made by the dead. Sometimes, as by one of the North American tribes, inability to pass the river is the assigned reason for a supposed return of the soul. The revival from trance is thus explained the other-self, failing to get across the river, came back. It is not impossible that the conceived danger of this river-crossing—a danger so great that, having once escaped, the deceased will not encounter it again—leads to the idea that spirits cannot pass over running streams.

Where a migrating tribe, instead of reaching the new

habitat by an over-land route, has reached it by ascending a river, the tradition, and the consequent notion of the journey back to the ancestral home, take other shapes and entail other preparations. In some regions, where vegetation is extremely luxuriant, rivers afford, if not the only means of access to the interior, still, by far the easiest means. Humboldt tells us that in South America, tribes spread along the rivers and their branches: the intervening forests being impenetrable. A kindred distribution occurs in Borneo; where the more civilized invading races are located about the rivers and shores, and where the country has obviously been penetrated by ascending the rivers. Hence certain funeral rites which occur in Borneo. St. John says that the Kanawits have a custom of sending much of a deceased chief's goods adrift in a frail canoe on the river. Rajah Brooke tells us that "the Malanans used to drift the corpse of their chiefs out to sea in a boat, along with his sword, eatables, clothes, etc., and often with a slave woman chained to the boat." It is worth remarking that, describing this as a custom of the past, he says that at present "these crafts are placed near their graves" — an example of the way in which observances become modified and their meanings obscured. A kindred example which I may here add, is furnished by the Chinooks, who, putting the body in a canoe near the river-side, place the canoe with its head pointing down the stream.

The journey to the other-world down a river, brings us with scarcely a transition to the remaining kind of journey — that over the sea. We habitually find it where there has been an over-sea migration. The heaven of the Tongans is a distant island. Though it is not clear where Bulu, the Fijian abode of bliss, is situated, yet "the fact that it cannot be reached except in a canoe, shows that it is separated from this world by water." Describing the entrance to the Samoan Hades as "at the west-end of Savai," Turner says that "to reach this entrance the spirit (if be-

longing to a person living on another island) journeyed partly by land and partly swimming the intermediate sea or seas." He also tells us that the Samoans "say of a chief who has died, 'he has sailed.'" Along with, or instead of, these distinct statements, we have, in other cases, practices sufficiently significant. Ellis tells us that sometimes a part of a canoe is found near a grave in the Sandwich Islands. In New Zealand, which has been peopled by these immigrant Polynesians, Angas says a canoe, sometimes with sails and paddles, or part of a canoe, is placed beside or in their graves, while the statement of Thompson that the bodies of New Zealand chiefs were wrapped in mats and put into canoe-shaped boxes, shows us a modification which throws light upon other such modifications. After meeting with these observances in habitats that have necessarily been reached by boats, we cannot doubt the meanings of similar observances elsewhere. Already it has been pointed out that the Chonos, of western Patagonia, who trace their descent from western people across the ocean, expect to go back to them after death; and here it is to be added that "they bury their dead in canoes, near the sea." Of the Araucanians, too, with like traditions and like expectations, we read that a chief is sometimes buried in a boat. Bonwick alleges of the Australians that formerly, in Port Jackson, the body was put adrift in a bark canoe; and Angas, again showing us how an observance having at first an unmistakable meaning passes into a form of which the meaning is less distinct, says the New South Wales people sometimes bury the dead in a bark canoe.

Like evidence is found in the northern hemisphere. Ross tells us that among the Chinooks "all excepting slaves, are laid in canoes or wooden sepulchres," we learn from Bastian that the Ostyaks "bury in boats", and there were kindred usages among our own Scandinavian ancestors.

§ 113. Yet a further explanation is thus afforded. We

see how, in the same society, there can arise, and how, under certain conditions, there will inevitably arise, beliefs in two or more other-worlds. When with migration there is joined conquest, and peoples having different traditions become organized into one community, they will have different ancestral homes to which their respective dead depart. Habitually, where physical and mental unlikenesses indicate unlike origins of the governing classes and the governed classes, there is a belief in unlike other-worlds for them. The Samoan chiefs "were supposed to have a separate place allotted to them, called Puluotu." We learn from Angas that among the New Zealanders, the burial in a canoe, with the expectation of going back to the fatherland, is confined to the chiefs. In the opinion of some Tongans, though not of all, only the chiefs have souls, and go to Bolotoo, their heaven the probability being that the traditions of the more recent conquering immigrants, and the belief in their return journey after death, are relatively distinct and dominant. Using the clue thus furnished, we may see how the different other-worlds for different ranks in the same society, which have originally no ethical applications, may become other-worlds for good and bad respectively. On remembering that our word *villain*, now so expressive of detestable character, once merely meant a serf, while *noble* originally referred simply to the conspicuousness due to high social position, we cannot question the tendency of early opinion to identify subjection with badness and the possession of power with goodness. On also remembering that the conquerors usually form the military class, while the conquered become slaves who do not fight, and that in societies so constituted worth is measured by bravery, we perceive a further reason why the other-worlds of conquering and conquered, though originally their respective ancestral homes, come to be regarded as places for worthy and unworthy. Naturally, therefore, where indigenous descendants from cave-dwellers

have been subjugated by an invading race, it will happen that the respective places to which the two expect to return, will differentiate into places for bad and good. There will arise such a belief as that of the Nicaragua-people, who held that the bad (those who died in their houses) went under the earth to Mictanteot, while the good (who died in battle) went to serve the gods where the sun rises, in the country whence the maize came. As the Patagonians show us, the unsubjugated descendants of cave-dwellers do not regard the under-world as a place of misery. Contrariwise, their return after death to the "divine caverns," is to bring a pleasurable life with the god who presides in the land of strong drink. But where, as in Mexico, there have been conquests, the under-world is considered, if not as a place of punishment, still as a relatively-uncomfortable place.

Of course, the conceptions thus originating will in every case vary with the antecedents. Endless modifications and incongruities of beliefs about these respective other-worlds must result. But the noteworthy fact is that a supposed infernal abode like the Greek Hades, not undesirable as conceived by primitive descendants of troglodytes, may differentiate into a dreary place, and eventually into a place of punishment, mainly by virtue of the contrast with the better places to which other souls go—Isles of the West for the specially brave, or the celestial abode for favourites of the gods. And the further noteworthy fact is, that the most inhospitable regions into which rebels are expelled, yield a kindred origin for a Tartarus or a Gehenna.*

§ 114. Interpretable after the same general manner, is

* While this is in the press, I find in the oldest of all known legends, the Babylonian account of the flood, evidence that heaven, as then conceived, was the territory whence the conquering race came. The residence of the gods, to which Xisuthrus is translated for his piety, is "on the Persian Gulf, near the mouth of the Euphrates"; and Mr G Smith points out that this was the sacred region whence came the beings who taught the Babylonians the arts, and were worshipped by them.

the remaining conception of another world, above or outside of this world. The transition from a mountain abode to an abode in the sky, conceived as the sky is by primitive men, presents no difficulties.

Burial on hills is practised by many people; and we have already seen that there are places, as Borneo, where along with the custom of depositing a chief's remains on some peak difficult of access, there goes the belief that the spirits of the departed inhabit the mountain-tops. That the custom causes the belief, is in this case probable; though, as we shall presently see, an apparently-similar belief may in some cases have another origin. Here, however, it concerns us only to observe that "the highest mountain in sight" is regarded as a world peopled by the departed; and that in the undeveloped speech of savages, living on a peak up in the heavens is readily confounded with living in the heavens. Remembering that, originally, heaven is considered as a dome supported by these loftiest peaks the conclusion that those who live on them have access to the upheld firmament, is a conclusion certain to be drawn. Once established, this admits of development. There may readily come the conception of heavens one outside another, inhabited by successively-higher grades.

But, as already hinted, besides the above origin, carrying with it the belief that the souls of deceased men live on the mountain tops, or in the heavens, there is another possible, and indeed probable, origin, not carrying such a conclusion; but, contrariwise, restricting this heavenly habitation to a different race of beings. Observe how this other belief is suggested.

The choice of high places for purposes of defence, we may trace back through civilized times into barbarous times. What many of our own castles show us, what we are shown by modern and ancient fortresses on the Rhine, what we are shown by mediæval towns and villages capping the hills in Italy, and by the scattered fastnesses perched on scarcely accessible

peaks throughout the East, we are shown wherever primitive savagery has been outgrown in habitats affording fit places. A fortress on an elevation in ancient Mexico, is described by Godoi; the Chibchas made entrenchments on hills, and the Peruvians fortified the tops of mountains by ranges of walled moats. Both invaded and invaders thus utilize commanding eminences. The remains of Roman encampments on our own hills, remind us of this last use. Clearly then, during the conflicts and subjugations that have been ever going on, the seizing of an elevated stronghold by a conquering race, has been a not unfrequent occurrence, and the dominance of this race has gone along with the continued habitation of this stronghold. An account which Rajah Brooke gives of his prolonged contest with a mountain-chief in Borneo, shows us what would be likely to happen when the stronghold was in possession of the superior race. His antagonist had fortified an almost inaccessible crag on the top of Sadok—a mountain about 5,000 feet high, surrounded by lower mountains. Described by Rajah Brooke as "grim and grand," it figures in Dyak legends and songs as "the Grand Mount, towards which no enemy dare venture." The first attempt to take this fastness failed utterly; the second, in which a small mortar was used, also failed; and only by the help of a howitzer, dragged up by the joint strength of a hundred yelling Dyaks, did the third attempt succeed. This chieftain, driven out only by the appliances of a civilized race, was naturally held in dread by surrounding tribes. "Grandfather Rentap," as he was commonly called, was dangerously violent; occasionally killed his own men, was regardless of established customs; and, among other feats, took a second wife from a people averse to the match, carried her off to his eyrie, and, discarding the old one, made the young one Ramee of Sadok. With his followers and his subordinate chiefs, Layang, Nanang, and Loyoh, holding secondary forts serving as outposts, he was unconquerable by any of the

native powers. Already there were superstitions about him. "Snakes were supposed to possess some mysterious connection with Rentap's forefathers, or the souls of the latter resided in these loathsome creatures." Now if,

instead of a native ruler thus living up in the clouds (which hindered the last attack), occasionally coming down to fulfil a threat of vengeance, keeping the country around in fear, and giving origin to stories already growing into superstitions, we suppose a ruler belonging to an invading race, which, bringing knowledge, skill, arts and implements, unknown to the natives, were regarded as beings of superior kind, just as civilized men now are by savages, we shall see that there would inevitably arise legends concerning this superior race seated in the sky. Considering that among these very Dyaks, divine beings are conceived as differing so little from men, that the supreme god and creator, Tapa, is supposed to dwell "in a house like that of a Malay, * * * himself being clothed like a Dyak," we shall see that the ascription of a divine character to a conqueror thus placed, would be certain. And if the country was one in which droughts had fostered the faith in rain-makers and "heaven-herds"—if, as among the Zulus, there was a belief in weather-doctors able to "contend with the lightning and hail," and to "send the lightning to another doctor to try him," this ruler, living on a peak round which the clouds formed and whence the storms came, would, without hesitation, be regarded as the causer of these changes—as a thunderer holding the lightnings in his hand.*

Joined with which ascribed powers,

* A belief of the Ancient Mexicans illustrates this notion that beings living where the clouds gather, are the causers of them. "*Tlaloc*, otherwise *Tlalocateuctli* (Master of Paradise) was the god of water. They called him fertilizer of the earth, * * * he resided upon the highest mountains, where the clouds are generally formed * * * The ancients also believed that in all the high mountains there resided other gods, subaltern to *Tlaloc*. They * * * were revered not only as gods of water, but also as the gods of mountains"—*Clavigero*, bk vi, ch 4 and 5

there would nevertheless be stories of his descents from this place up in the heavens, appearances among men, and amours with their daughters. Grant but a little time for such legends and interpretations to be exaggerated and idealized—let the facts be magnified as was the feat of Samson with the ass's jawbone, or the prowess of Achilles making "the earth flow with blood," or the triumphant achievement of Rameses II in slaying 100,000 foes single-handed, and we reach the idea that heaven is the abode of superhuman beings commanding the powers of nature and punishing men *

I am aware that this interpretation will be called Euhemeristic, and that having so called it, the mythologists whose views are now in fashion will consider it disposed of. Only incidentally implied as this view here is, I must leave it for the present unsupported. By-and-by, after showing that it is congruous with all the direct evidence we have respecting primitive modes of thought, I hope further to show that the multitudinous facts which existing uncivilized and semi-civilized races furnish, yield no support to the current theories of mythologists, and that these theories are equally at variance with the laws of mental evolution.

§ 115. The general conclusion to which we are led is, that the ideas of another world pass through stages of development. The habitat of the dead, originally conceived as coinciding with that of the living, gradually diverges—here to the adjacent forest, there to the remoter forest, and elsewhere to distant hills and mountains. The belief that the dead rejoin their ancestors, leads to further divergences

* It may be added that such a conception, once evolved, need not be restricted to the original locality. Storms bursting in the sky far from this mountain stronghold, would be taken as evidence that the thunderer had access to other parts of the heavens, and hence when the race migrated, this heaven-god, proved by the occurrence of storms to have accompanied them, would be eventually localized on other mountains whence the storms commonly came

which vary according to the traditions. Stationary descendants of troglodytes think they return to a subterranean other-world, whence they emerged; while immigrant races have for their other-worlds the abodes of their fathers, to which they journey after death—over land, down a river, or across the sea, as the case may be. Societies consisting of conquerors and conquered, having separate traditions of origin, have separate other-worlds, which differentiate into superior and inferior places, in correspondence with the respective positions of the two races. Conquests of these mixed peoples by more powerful immigrants, bring further complications—additional other-worlds, more or less unlike in their characters. Finally, where the places for the departed, or for superior classes of beings, are mountain-tops, there is a transition to an abode in the heavens, which, at first near and definite, passes into the remote and indefinite. So that the supposed residence for the dead, coinciding at first with the residence of the living, is little by little removed in thought. distance and direction grow increasingly vague, and finally the localization disappears in space.

All these conceptions, then, which have their root in the primitive idea of death, simultaneously undergo like progressive modifications. Resurrection, once looked for as immediate, is postponed indefinitely, the ghost, originally conceived as quite substantial, fades into ethereality, the other-life, which at first repeated this exactly, becomes more and more unlike it; and its place, from a completely-known adjacent spot, passes to a somewhere unknown and unimagined.

CHAPTER XVI.

THE IDEAS OF SUPERNATURAL AGENTS.

§ 116 SPECIALIZED as they are in correspondence with our thoughts, our words do not represent truly the thoughts of the savage, and often entirely misrepresent them. The word supernatural has meaning only by antithesis with natural, and until there has been reached that idea of orderly causation which we call natural, there can exist no such idea as we imply by supernatural. I am obliged to use the word, however, in default of a better, but the reader must be cautioned against ascribing to the primitive man a conception like that which the word gives to us.

This premised, let us, so far as we can, picture the imaginary environment the primitive man produces for himself, by the interpretations described in the last four chapters. Inconsistent in detail as are the notions he forms concerning surrounding actions, they are, in their *ensemble*, consistent with the notions that have been set forth as necessarily generated in him.

§ 117. In every tribe, a death from time to time occurring, adds another ghost to the many ghosts of those who died before. We have seen that, originally, these ghosts are thought of as close at hand—haunting the old home, lingering near the place of burial, wandering about in the adjacent bush. Continually accumulating, they form a sur-

rounding population, usually invisible, but some of them occasionally seen. Here are a few illustrations

By Austrahans the supernatural beings thus derived are supposed to be everywhere the whole face of the country swarms with them—thickets, watering-places, rocks. The Veddahs, who trust in “the shades of their ancestors and their children,” “believe that the air is peopled with spirits, that every rock and every tree, every forest and every hill, in short, every feature of nature, has its *gennus loci*” The Tasmanians imagine “a host of malevolent sprits and mischievous goblins” in caverns, forests, clefts, mountain-tops. Where burial within the house is practised, the ghosts of the dead are conceived to be at the elbows of the living; and where, as among the Uaupés, “some of the large houses have more than a hundred graves in them,” they must be thought of as ever jostling their descendants. Even in the absence of house-burial this conception is often vivid, as, according to Mason, among the Karens. “To a Karen, the world is more thickly peopled with spirits than it is with men * * * The spirits of the departed dead crowd around him.” And similarly the Tahitians “imagined they lived in a world of spirits, which surrounded them night and day, watching every action.” Here regarded as friendly, and here as workers of mischief, the ancestral spirits are, in some cases, driven away. We are told by Barbe of the Nicobar people, that—

“Once in the year, and sometimes when great sickness prevails, they [the Nicobarians] build a large canoe, and the Minloven, or priest, has the boat carried close to each house, and then, by his noise, he compels all the bad sprits to leave the dwelling, and to get into the canoe, men, women, and children assist him in his conjuration. The doors of the house are shut, the ladder is taken out [the houses are built on posts 8 or 9 feet high], the boat is then dragged along to the sea-shore, where it is soon carried off by the waves with a full cargo of devils”

Bastian tells us that there is a like custom in the Maldivé islands. And some of the Indians of California have

similarly an annual expulsion of the ghosts which have accumulated during the year.

These multitudinous disembodied men are agents ever available, as conceived antecedents to all surrounding actions which need explanation. It is not requisite that their identification as ghosts should continue in a distinct form. many of them are sure to lose this character. The swarms of demons by whom the Jews thought themselves surrounded, while regarded by some as the spirits of the wicked dead, readily came to be regarded by others as the offspring of the fallen angels and the daughters of men. When the genealogies of an accumulating host have been lost, there remains nothing to resist any suggested theory respecting their origin. But though the Arab who thinks the desert is so thickly peopled with spirits that on throwing anything away he asks the forgiveness of those which may be struck, probably does not now regard them as the wandering doubles of the dead; it is clear that, given the wandering doubles of the dead, supposed by the primitive man to be everywhere around, and we have the potentiality of supernatural agencies unlimited in number and capable of indefinite variation.

§ 118. Hence the naturalness, and, indeed, the inevitableness, of those interpretations which the savage gives of surrounding phenomena. With the development of the doctrine of ghosts, there grows up an easy solution of all those changes which the heavens and earth are hourly exhibiting. Clouds that gather and presently vanish, shooting stars that appear and disappear, sudden darkenings of the water's surface by a breeze, animal-metamorphoses, transmutations of substance, storms, earthquakes, eruptions—all of them become explicable. These beings to whom is ascribed the power of making themselves now visible and now invisible, and to whose other powers no limits are known, are omnipresent. Accounting as they seem to do

for all unexpected changes, their own existence becomes further verified. No other causes for such changes are known or can be conceived; therefore these souls of the dead must be the causes; therefore the survival of souls is manifest: a circular reasoning which suffices many besides savages

The interpretations of nature which precede scientific interpretations, are thus the best that can then be framed. If by the Karens "unaccountable sounds and sights in the jungles" are, as Mason says, ascribed to the ghosts of the wicked, the Karens do but assume an origin which, in the absence of generalized knowledge, is the only imaginable origin. If, as Bastian tells us, the religion of the Nicobar people consists in attributing to evil spirits the unlucky events they are not able to explain by ordinary causes, they are simply falling back on such remaining causes as they can conceive. What alternative is there? Livingstone describes how certain rocks which, having been intensely heated by the sun, are suddenly cooled externally in the evening, break with loud reports, and these reports the natives set down to evil spirits. To what else should they set them down? Uncivilized men are far removed from the conception that a stone may break by unequal contraction; and in the absence of this conception, what assignable cause of breaking is there, but one of these mischievous demons everywhere at hand? In his account of the Danakil, Major Harris tells us that "no whirlwind ever sweeps across the path without being pursued by a dozen savages with drawn creeses, who stab into the centre of the dusty column in order to drive away the evil spirit that is believed to be riding on the blast." Ludicrous as this notion appears, we have but to ask what is the physical interpretation of a sand-whirlwind, to see that such an interpretation cannot be framed by the savage, and that the only conceivable interpretation is that which he gives. Occasionally, too, his experiences suggest that such agencies are multi-

tudinous, and everywhere present. Describing a tropical scene, Humboldt says—"the surface of these sands, heated by the rays of the sun, seems to be undulating like the surface of a liquid * * * the sun animates the landscape, and gives mobility to the sandy plain, to the trunks of trees, and to the rocks that project into the sea like promontories " What shakes the tree-trunks and makes the rocks oscillate ? There is no alternative but to assume innumerable invisible beings scattered about everywhere That these appearances are illusions caused by refraction is unimaginable.

Some of the above examples yield direct evidence that among races in comparatively-early stages, the ghosts of the dead are the assigned agents for unusual phenomena, and there are other such examples Thus, Thomson tells us that the Araucanians think tempests are caused by the fights which the spirits of their countrymen have with their enemies. Such interpretations differ from the interpretations of more advanced races, only by presenting the individualities of dead friends and foes in their original forms. the eventual fading of these individualities, leaves notions of personal agencies less definite in kind An eddy in the river, where floating sticks are whirled round and engulfed, is not far from the place where one of the tribe was drowned and never seen again What more manifest, then, than that the double of this drowned man, malicious as the unburied ever are, dwells thereabouts, and pulls these things under the surface—nay, in revenge, seizes and drags down persons who venture near ? When those who knew the drowned man are all dead—when, after generations, the details of the story, thrust aside by more recent stories, have been lost—and especially when there comes some conquering tribe, in whose past history the local stories have no roots ; there survives only the belief in a water-demon haunting the place And so throughout There is nothing to maintain in tradition the likenesses between the ghosts and the individuals they were derived from ; and along with

innumerable divergences, there comes not only a fading of individual traits, but also at length a fading of human traits: varieties pass into species, and genera, and orders, of supernatural beings.

§ 119. Of course, if the ghosts of the dead, originally conceived in their individual forms, and as they accumulate and differentiate, passing gradually into numerous less distinct but still personal forms, are thus the agents supposed to work all the notable effects in the surrounding world; they are also the agents supposed to work notable effects in the affairs of men. Ever at hand and moved by feelings of amity or enmity, it is incredible that they should not interfere with human actions. Manifestly they continually aid or hinder. The soul of a dead foe is on the watch to cause an accident, the soul of a late relative is ready to help and to guard if in good humour, or, if offended, to make something go wrong.

Hence explanations, universally applicable, of successes and failures. Through all races, from the lowest upwards, such explanations have prevailed, differing only in the extent to which the aiding or hindering spirit has lost the human character. Low down we have the Veddah, who looks to the shade of his dead parent or child to give him success in the chase, and ascribes a bad shot to the lack of an invocation, we have the Australian who, "if a man tumbles out of a tree and breaks his neck," thinks that "his life has been charmed away by the boyala-men of another tribe", we have the Ashantees, who "believe that the spirits of their departed relatives exercise a guardian care over them," and that "the ghosts of departed enemies are * * * bad spirits," who work mischief. Higher up we have, among the Homeric heroes, feats of arms set down to the assistance of the supernatural beings who join in the battle. With Hector "one at least of the gods is ever present, who wards off death", and "Menelaus conquered

by Minerva's aid." Diomed is unscathed because an immortal "has turned into another course the swift shaft just about to hit him"; Paris, dragged by the helmet, would have been lost had not Venus, "who quickly perceived it, broke for him the thong", and Idæus escaped only because "Vulcan snatched him away." Be it the Araucanian who ascribes success to the aid of his particular fairy; be it the African chief Livingstone names, who thought he had ensured the death of an elephant they were attacking, by emptying his snuff-box as an offering to the Barimo; be it the Greek whose spear is well fixed in a Trojan's side by the guiding hand of his favouring deity, be it the Jew's ministering angel or the Catholic's patron saint; there is identity in essentials, and only more or less of difference in form. The question is solely how far this evolution of the ghosts of the dead into supernatural agents, has gone

§ 120 Lastly, and chiefly, we have here to note the fact that this machinery of causation which the primitive man is inevitably led to frame for himself, fills his mind to the exclusion of any other machinery. Fully to understand the development of human thought under all its aspects, we must carefully observe the truth that this hypothesis of ghost-agency gains a settled occupation of the field, long before there is either the power or the opportunity of gathering together and organizing the experiences which yield the hypothesis of physical causation. Even among ourselves, with our vast accumulations of definite knowledge and our facilities for diffusing it, the displacement of an old doctrine by a new one is difficult. Judge then its difficulty where the few facts known remain ungeneralized, unclassified, unmeasured, where the very notions of order, cause, law, are absent; where criticism and scepticism are but incipient, and where there is not even the curiosity needful to prompt inquiry. If, parodying a common adage, we

may say that prepossession is nine points of belief—if this is so even in the relatively-plastic minds of the civilized; how many points of belief must it be in the relatively-rigid minds of the uncivilized?

Hence the surprise commonly expressed at these primitive interpretations is an unwarranted surprise—a surprise caused by overlooking the nature and conditions of primitive thought. If, as Mr St. John tells us, the Dyaks never take the natural explanation of any phenomenon, such as an accident, but always “fly to their superstitions;” they fly to the only kind of explanation which yet exists for them. The absurdity is in supposing that the uncivilized man possesses at the outset, the idea of “natural explanation.” Only as societies grow, arts multiply, experiences accumulate, and constant relations of phenomena become recognized, registered, and familiar, does the notion of natural explanation become possible. Only then can there arise even scepticism respecting these earliest conclusions. Only then can there begin the slow process of replacing them.

And now, recognizing this unshakable belief which the primitive man acquires in these agencies afterwards distinguished as supernatural, but which are at first the only imaginable agencies, let us go on to contemplate another series of interpretations he makes. Having seen how he is led to think of the activities in his environment as controlled by the spirits of the dead, let us observe how he is similarly led to think of the spirits of the dead as controlling the activities within his body and the bodies of other men.

CHAPTER XVII.

SUPERNATURAL AGENTS AS CAUSING EPILEPSY AND CONVULSIVE ACTIONS, DELIRIUM AND INSANITY, DISEASE AND DEATH.

§ 121 THE phenomena exhibited during evolution, cannot be placed in serial order. Always there go on divergences and re-divergences. Setting out with the primitive ideas of insensibility, of death, and of the ghost, we have traced along certain lines the developing ideas of another life and another world; and along other lines we have traced the developing ideas of supernatural agents, as existing on all sides. Returning now to the insensible body as the starting point, we have to observe how a further class of ideas has been simultaneously developing, by the aid of those we have considered.

In sleep, in swoon, in trance, in apoplexy, there is almost complete quiescence, and at death the quiescence becomes absolute. Usually, then, during the supposed absence of the other-self, the body does nothing. But there sometimes occur cases in which the body, lying on the ground with eyes closed, struggles violently; and in which, after the ordinary state is resumed, the individual denies having struggled—says that he knows nothing about those actions of his body which the spectators saw. Obviously, then, his other-self has been away. But how came his body to behave so strangely during the interval?

The answer given to this question is the most rational which the primitive man can give.

§ 122. If, during insensibilities of all kinds, the soul wanders, and, on returning, causes the body to resume its activity—if the soul can thus not only go out of the body but can go into it again; then may not the body be entered by some other soul? The savage thinks it may.

Hence the interpretation of epilepsy Reade tells us that the Congo people ascribe epilepsy to demoniac possession. Among the East Africans, falling sickness is peculiarly common, and, Burton says, has doubtless given rise to the prevalent notion of possession. Among Asiatic races may be named the Kalmucks, by whom, according to Pallas, epileptics are regarded as possessed. And Bastian remarks that the Arabic language has the same word for epilepsy and possession by devils. It is needless to illustrate the familiar truth that this explanation was current during the early stages of civilization, and that it persisted up to comparatively-recent times.

Beyond question, then, the original inference is that while the patient's other-self has gone away, some disembodied spirit, usurping its place, uses his body in this violent way. Such disembodied spirit is not in the Scriptural instances that might be named, or in the foregoing instances, defined. But where we have a specific account of the conception in its earliest state, we learn that the assumed supernatural agent is a ghost. From the Amazulu cross-examined by Canon Callaway, there is clearly brought out the statement that when a diviner is becoming possessed by the Itongo (ancestral spirits), "he has slight convulsions." Moreover, a witness who "went to a person with a familiar spirit to inquire respecting a boy * * * who had convulsions," got the answer—"he is affected by the ancestral spirits."

§ 123 A further question comes before the primitive

mind, and a further rational corollary is drawn, which develops into a series of curious but consistent ideas.

Occasionally a person, while still conscious, cannot control the actions of his body. He finds himself doing something without willing it, or even in spite of his will. Is it, then, that another soul has entered him; even though his own soul has not wandered away? This is the only imaginable explanation. If, during the absence of the other-self, bodily contortions are due to some intruding spirit that has taken possession of the body, and makes it do things its owner did not cause, then if, at other times, the body does things not caused by its owner, though he is still in it, must not these have been caused by an intruding spirit? An affirmative answer is inevitable.

Hence the explanation of hysteria, with its vehement struggles, its uncontrollable and meaningless laughs, sobs, and cries. Among the Amazulu, hysterical symptoms are counted as traits of one who is becoming an Inyanga, or diviner—one who is becoming possessed. The remark made by Parkyns respecting the Abyssinians, that "the greater part of the 'possessed' are women," indicates a kindred interpretation—women being so much more liable to hysteria than men. And when we read in Mariner, that among the Tongans inspiration is not confined to the priests, but is sometimes experienced by others, especially females, we may reasonably conclude that fits of hysterics are the signs of possession referred to. Indeed, is not one of the hysterical symptoms conclusive proof? What can be said of the *globus hystericus*—a ball that is suddenly felt within the body—unless it is this alleged possessing spirit?

Carried thus far, the explanation has to be carried further. If these more violent actions of the body, performed in defiance of the will, are ascribable to a usurping demon, so, too, must be the less violent actions of this kind. Hence the primitive theory of sneezing and yawning.

The Amazulu regard these actions which the individual can prevent only with difficulty, or not at all, as caused by the Itongo—as marks of possession. When a man is becoming an Inyanga,

“his head begins to give signs of what is about to happen. He shows that he is about to be a diviner by yawning again and again, and by sneezing again and again. And men say, ‘No’ Truly it seems as though this man was about to be possessed by a spirit’ ”

In other cases we have proof, not of permanent possession, but of temporary possession, being inferred from the sneeze. The Khonds dash vessels of water upon the priest when they wish to consult him. He sneezes, and becomes inspired. Of course, there is nothing to determine whether this possession is by a friendly or by an unfriendly spirit it may be, as among the Zulus, an ancestral ghost, or, as among other peoples, it may be a malicious demon. But be the sneeze, as with the Moslem, a reason for asking Allah to protect him against Satan as the presumed cause, or be it, as with the Christian, the occasion of a “God bless you” from bystanders, or be it the ground for putting faith in an utterance as inspired; the implication, which alone here concerns us, is that involuntary actions of these kinds are regarded as showing that some intruder has made the body do what its owner did not intend it to do.

Two other interpretations of kindred natures may be added. Cochrane tells us that among the Yakuts, in a disorder accompanied by violent hiccup, “they persist in believing that a devil is in the body of the person afflicted.” A neighbouring people, the Kirghiz, furnish a still stranger instance. Mrs. Atkinson says that a woman in child-bed is supposed to be possessed by a devil; and it is even the custom to beat her for the purpose of driving him away.

In this last case, as in all the others, there are involuntary muscular contractions. These may reasonably be ascribed to possession, if those of epilepsy are so; and we see that

the ascription of epilepsy to possession is an implication of the original ghost-theory.

§ 124 Certain allied phenomena, explicable in like manner and otherwise inexplicable, further confirm the doctrine of possession. I refer to the phenomena of delirium and madness.

What is come to this man who, lying prostrate, and refusing to eat, does not know those around; now mutters incoherently or talks nonsense, now speaks to some one the bystanders cannot see, now shrinks in terror from an invisible foe; now laughs without a cause? And how does it happen that when, after some days, he has become calm again, and speaks to those around in his usual way, he either knows nothing about these strange doings of his, or narrates things which no one witnessed? Manifestly one of these spirits or ghosts, swarming around, and some of them ever on the watch to do mischief, had entered his body at night while he was away, and had thus abused it. That savages do thus interpret the facts we have not much proof probably because travellers rarely witness among them this kind of mental disturbance. Still, Petherick says the Arabs suppose that "in high fever, when a person is delirious, he is possessed by the devil." And there is the testimony of Southey respecting the Tupis he recognizes delirium as one of the sources of their superstitions.

But when from temporary insanity we pass to prolonged or permanent insanity, we everywhere find proof that this is the interpretation given. Turner tells us that the Samoans attributed madness to the presence of an evil spirit, and Marner says the like of the Tongans. The Sumatrans, too, according to Marsden, consider that lunatics are possessed. Among more advanced races the interpretation has been, and still remains, the same. When the writer of *Rambles in Syria* tells us that, "in the East, madness is tantamount to inspiration," we are reminded that if there is any difference between this conception and the conceptions

recorded of old, it concerns only the nature of the possessing spirit, not its existence. These earlier records, too, yield evidence that the original form of the belief was the form to be inferred. Though in the days of Josephus, only some Jews held that the demons which enter men, "are no other than the souls of the wicked"; yet, as the possessed were said to frequent burial-places, and as demons were supposed to make tombs their favourite haunts, we have good reasons for thinking that the possessing spirit was originally conceived as a ghost.

The continuance of this view of insanity through mediæval days, down to the days when the 72nd canon of our Church tacitly embodied it by forbidding the casting out of devils without a special licence, is easy to understand. Only after developing science had made familiar the idea that mental states result from nervous actions, which can be disordered by physical causes, did it become possible to conceive the madman's amazing ideas and passions in any other way than as the expressions of some nature unlike his own.

We must not overlook a verification which the behaviour of the insane yields to the belief in surrounding ghosts or spirits. The uncivilized or semi-civilized man, is wholly unable to think of the maniac's visions as subjective illusions. He is at an immeasurable distance from this conception—neither his intellect, nor his language, nor his knowledge, suffices. What then must he conclude when he hears a maniac talking furiously to an invisible person, or throwing a missile at some being, unseen by others, whom he wants to drive away? He is fearfully in earnest. His frantic gestures, his glaring eyes, his shrieking voice, make it impossible to doubt the strength of his belief. Obviously, then, there are mischievous demons around—manifest to him but not to bystanders. If any doubted the existence of supernatural agents, they can no longer doubt.

One further noteworthy idea is thus yielded to the primitive man. In their paroxysms, the insane are extremely

strong—strong enough to cope single-handed with several men. What is the inference? The possessing demon has superhuman energy. The belief thus suggested has developments hereafter to be noted.

§ 125. Once established, this mode of explaining unusual actions, mental and bodily, extends itself. Insensibly it spreads from abnormalities of the kinds above instanced to those of other kinds. Diseases are soon included under the theory. Seeing that bodily derangement often co-exists with mental derangement (as in fever that is attended by delirium), the inference is that the same agent causes both. And if some unhealthy states are produced by in-dwelling demons, then others are thus produced. An intruding spirit is either in the body, or is hovering around, inflicting evil on it: if not of its own malicious will, then at the dictate of an enemy.

The primitive form of this interpretation is shown us by the Amazulu. Even a stitch in the side they thus explain: "if the disease lasts a long time," they say, "he is affected by the Itongo. He is affected by his people who are dead." According to Turner, the Samoans supposed that the spirits of the dead "had power to return, and cause disease and death in other members of the family." As we saw in § 92, the New Caledonians "think white men are the spirits of the dead, and bring sickness." The Dyaks who, like the Australians, attribute every disease to spirits, like them, too, personify diseases. They will not call the small-pox by its name, but ask—"Has he yet left you?" Sometimes they call it "the chief." In these cases ghosts are the assumed agents; and in some of them, bodily possession of the sufferer is alleged or implied. In other cases, the supernatural agent, not specified in its origin, appears to be regarded as external. By the Arawaks, pain is called "the evil spirit's arrow," and the Land-Dyaks believe that sickness is occasionally "caused by spirits inflicting

on people invisible wounds with invisible spears." But everywhere the supposed cause is personal. In Asia, the Karens "attribute diseases to the influence of unseen spirits", by the Lepchas, all ailments "are deemed the operations of devils"; and the Bodo and Dhimals similarly think them due to demoniacal agency. In Africa, the Coast Negroes ascribe illness to witchcraft or the operation of the gods; the Kaffirs consider it caused by enemies and evil spirits; and the offended ancestor of a Zulu is represented as saying—"I will reveal myself by disease." In America, the Comanches think a malady is caused by the blasting breath of a foe; and the Mundurucús regard it as the spell of an unknown enemy.

If instead of "ghost" we read "supernatural agent," the savage theory becomes the semi-civilized theory. The earliest recorded hero of the Babylonians, Izdubar, is smitten with a grievous malady by the offended goddess Ishtar; in the first book of the *Iliad*, the Greeks who die of pestilence are represented as hit by Apollo's arrows—an idea parallel to one of the savage ideas above named; it was believed by the Jews that dumbness and blindness ceased when the devils causing them were ejected; and in after-times, the Fathers described demons as inflicting diseases. How persistent this kind of interpretation has been, we are shown by the fact that the production of illness by witches, who instigate devils, is even now alleged among the uncultured, and by the fact that the cultured still countenance the belief that illness is diabolically caused. A State-authorized expression of this theory of disease, is often repeated by priests. In the service for the visitation of the sick, one of the prayers is—"Let the enemy have no advantage over him," and another is—"renew in him " "whatsoever has been decayed by the fraud and malice of the devil."

§ 126. After contemplating the foregoing beliefs as naturally arising, the belief which the primitive man frames

respecting the cause of death, will no longer surprise us. It is a necessary sequence.

Insensibility, temporarily or prolonged, having been seen to follow a blow from a club, the conclusion is that this permanent insensibility has resulted from some such injury inflicted by an enemy unseen. In one form or other this conception occurs everywhere. The Uaupès, Wallace tells us, "scarcely seem to think that death can occur naturally", and Hearne says the Chippewayans ascribe the deaths of their chiefs to witchcraft, commonly by the Esquimaux. The Kalmucks believe that "death is caused by some spirit at the command of the deity"; the Kookies ascribe death, as well as all earthly evils, to supernatural causes, and the Khonds hold "that death is not the necessary and appointed lot of man, but that it is incurred only as a special penalty for offences against the gods." Arbousset states that the Bushmen think death is chiefly due to witchcraft, Burchell says of the Bechuanas, that death, even in old age, is ascribed to sorcery, the Coast Negroes, Winterbottom tells us, think "no death is natural or accidental", the belief of the Fans, as given by Burton, is that "no man, however old, dies a natural death", and Astley asserts that the Loango people do not believe in natural death, even from drowning or other accident. The Tahitians regarded the effects of poisons as "more the effects of the god's displeasure, * * * than the effects of the poisons themselves. * * * Those who were killed in battle were also supposed to die from the influence of the gods." And kindred ideas are current among the Sandwich Islanders, the Tannese, the Australians, etc.

A sequence must be named. Eventually the individualities of the special demons supposed to have caused death, merge in a general individuality—a personalized Death: the personalization probably beginning, everywhere, in the tradition of some unusually-ferocious foe whose directly-seen acts of vengeance were multitudinous,

and to whom, afterwards, unseen acts of vengeance were more and more ascribed. Be this as it may, however, we may trace the evolution of these primitive notions into those which existed in classic times and mediæval times. Butler tells us that at a Naga's burial, his friends arm themselves, and challenge the spirit who caused his death. Of the Tasmanians, Mr. Davis relates that, "during the whole of the first night after the death of one of their tribe, they will sit round the body, using rapidly a low, continuous recitative, to prevent the evil spirit from taking it away. Such evil spirit being the ghost of an enemy." On the other hand, among the Hottentots the conception has become partially generalized. Lichtenstein says they personalize death—say "Death sees thee." In which several facts we may perceive the root of the belief implied by the story of the deceased Alcestis, who is rescued from the grasp of the strong Death by the still stronger Hercules, and also the root of the belief implied by the old representations of Death as a skeleton, holding a dart or other weapon.

While observing this filiation, we should remark that, in the minds of many, the primitive notion still lingers. When reading with astonishment that savages, not recognizing natural death, ascribe all death to supernatural agency, we forget that even now supernatural agency is assigned in cases where the cause of death is not obvious—nay, in some cases where it is obvious. We still occasionally read the coroner's verdict—"Died by the visitation of God"; and we still meet people who think certain deaths (say the drowning of those who go boating on Sundays) directly result from divine vengeance. a belief differing from these savage beliefs, only in a modified conception of the supernatural agent.

§ 127 Considered thus as following from the primitive interpretation of dreams, and consequent theory of ghosts, souls, or spirits, these conclusions are quite consistent.

If souls can leave their bodies and re-enter them, why should not their bodies be entered by strange souls, while their own are absent? If, as in epilepsy, the body performs acts which the owner denies having performed, there is no choice but to assume such an agency. And if certain uncontrollable movements, as those of hysteria, together with the familiar ones of sneezing, yawning, and hiccup, take place without the will of the individual, the conclusion must be that here, also, some usurping spirit within him is directing the actions of his body in spite of him.

This hypothesis explains, too, the strange behaviour of the delirious and the insane. That the maniac's body has been taken possession of by an enemy, is proved by the fact that it is impelled to self-injury. Its right owner would not make the body bite and tear itself. Further, the possessing demon is heard to hold converse with other demons, which he sees but which bystanders do not see.

And if these remarkable derangements of body and mind are thus effected, the manifest inference is that diseases and disorders of less remarkable kinds are effected in the same way. Should there not be a demon within the body, there must be, at any rate, some invisible enemy at hand, who is working these strange perturbations in it.

Often occurring after long-continued derangement or disease, death must be caused by that which caused the disease. Whenever the death has no visible antecedent, this is the only possible supposition; and even when there is a visible antecedent, it is still probable that there was some demoniacal interference. The giving way of the foothold that led to a man's fatal fall down a precipice, or the particular motion which carried a spear into his heart, was very likely determined by the malicious spirit of a foe.

Thus these interpretations are congruous throughout. Given the initial idea, and the entire series follows.

CHAPTER XVIII.

INSPIRATION, DIVINATION, EXORCISM, AND SORCERY.

§ 128. If a man's body may be entered by a "wicked soul of the dead" enemy, may it not be entered by a friendly soul? If the struggles of the epileptic, the ravings of the delirious, the self-injuries of the insane, are caused by an indwelling demon; then must not the transcendent power or marvellous skill occasionally displayed, be caused by an indwelling beneficent spirit? If, even while the individual is conscious, the ghost of a foe may become joint occupant of his body and control its actions in spite of him, so producing hysteria, and sneezing, and yawning; may not joint occupancy be assumed by an ancestral ghost, which co-operates with him instead of opposing him: so giving extra strength, or knowledge, or cunning?

These questions the savage consistently answers in the affirmative. There result the ideas to be here glanced at.

§ 129. A fact named in the last chapter as having noteworthy implications, is that maniacs, during their paroxysms of excitement, are far stronger than men in their normal states. Hence, those holding the theory of possession infer that these supernatural agents have superhuman energies

That manifestations of unusual bodily power are thus accounted for, we find proofs among early traditions. En-

couraging Diomedes, Minerva says—"Into thy soul have I sent that intrepid ancestral might, such as the shield-brandishing knight Tydeus was wont to possess": words implying some kind of inspiration—some breathing-in of a soul that had been breathed-out of a father. More distinctly is this implied by certain still-earlier legendary histories of the Egyptians. In Prof. Lushington's translation of the third Sallier papyrus, narrating a conquest, Ramses II., the conqueror, invokes his "father Ammon," and has the reply—"Ramses Miamon, I am with thee, I thy father Ra. * * * I am worth to thee 100,000 joined in one." And when Ramses, deserted by his own army, proceeds to slay single-handed the army of his foes, they are represented as saying—"No mortal born is he whoso is among us."

Here several points of significance are observable. The ancestral ghost was the possessing spirit, giving superhuman strength. Along with development of this ancestral ghost into a divinity, amplified and idealized, had gone increase of this strength from something a little above the human to something immeasurably above the human. The conception, common to all these ancient races—Egyptians, Babylonians, Assyrians, Hebrews, Greeks—was that gods, otherwise much like men, were distinguished by power transcending that of men; and this conception, subject to no restraint, readily expanded into the conception of omnipotence. Further, any display of bodily energy passing that which was ordinary, naturally raised in the minds of observers the suspicion, either that there was possession by a supernatural being, or that a supernatural being in disguise was before them.

§ 130. Extraordinary power of mind is, of course, to be similarly explained. If an incarnate spirit, having either the primitive character of an ancestral ghost or some modified and developed character, can give superhuman

strength of body, then it can give, too, superhuman intelligence and superhuman passion. The general doctrine of mental inspiration is a corollary.

We are now so remote from this doctrine, as to have difficulty in thinking of it as once accepted literally. Existing primitive races, as the Tahitians, do indeed still show us, in its original form, the belief that the priest when inspired "ceased to act or speak as a voluntary agent, but moved and spoke as entirely under supernatural influence;" and so they make real to us the ancient belief that prophets and others such, were channels for divine utterances. But we less clearly recognize the truth that the inspiration of the poet was at first conceived in the same way. "Sing, O goddess, the destructive wrath of Achilles," was not, like the invocations of the Muses in later times, a rhetorical form; but was an actual prayer for possession. The Homeric belief was, in the words of Prof. Blackie, that "all great and glorious thoughts * * * come from a god." Of course, this mode of interpreting ideas and feelings admits of unlimited extension and variation. There is no way of deciding what amount of divergence from a usual mental state or power, warrants the assumption of a supernatural cause, and hence the assumption of a supernatural cause, made on the smallest suggestion, becomes habitual. In the *Iliad*, Helen is represented as having an ordinary emotion excited in her by Iris. "The goddess infused a tender desire into her mind, both of her former husband, and of her city, and her parents." Nor does the interpretation extend itself only to exaltations, emotional or intellectual. In the Homeric view, as Prof. Blackie points out, "not the doers of an evil deed, but the gods who inspire the purpose of doing it, are the real criminals;" and even a common error of judgment the early Greek explains by saying—"a god deceived me that I did this thing."

How this theory, beginning with that form still shown us by such savages as the Congoese, who ascribe the con-

tortions of the priest to the inspiration of the fetish, and differentiating, as above implied, into inspirations of the divine and the diabolical kinds, has persisted and developed, it is needless to show in detail. It will be enough to recognize the fact that it still lives in both sacred and secular thought. Indeed, between the earliest and latest views the unlikeness is far less than we suppose. When we read in Brinton that "among the Tahkalis the priest is accustomed to lay his hand on the head of the nearest relative of the deceased, and to blow into him the soul of the departed, which is supposed to come to life in his next child;" we are reminded that in the service for ordaining priests there are the words—"Receive the Holy Ghost for the office and work of a priest in the Church of God, now committed unto thee by the imposition of our hands." Not only in the theory of Apostolic Succession do we see this modified form of the savage belief in inspiration, but we see it, with a difference, in the ideas of the most unsacerdotal of our sects, the Quakers being moved by the spirit, as they understand it, is being temporarily possessed or inspired. And then, in its secular application, the primitive notion is traceable in the qualitative distinction, still asserted by some, between genius and talent.

§ 131. There is scarcely more than a nominal difference between the facts just grouped under the head of inspiration, and the facts to be grouped under the head of divination. The diviner is simply the inspired man using his supernatural power for particular ends.

We may again take the ideas of the Amazulu, which have been so carefully ascertained and clearly specified, as typical of the ideas originally framed. Mark, first, that bodily derangement, leading to mental perturbation, is the usual preliminary Fasting is requisite. They say "the continually-stuffed body cannot see secret things." Moreover, "a man who is beginning to be an Inyanga * * * does not

sleep, * * * his sleep is merely by snatches," "he becomes a house of dreams." Mark, next, that mental perturbation, rising to a certain point, is taken as proof of inspiration. Where the evidence is not strong, "some dispute and say, 'No. The fellow is merely mad. There is no Itongo [ancestral ghost] in him' Others say, 'O, there is an Itongo in him; he is already an Inyanga.'" And then mark, further, that the alleged possession is proved by his success doubters say—"We might allow that he is an Inyanga if you had concealed things for him to find, and he had discovered what you had concealed."

The conception here so clearly implied is traceable in all cases, if with less clearness, still with sufficient clearness: the chief difference being in the supposed nature of the mediating supernatural agent. Fasting, and such other treatment as produces abnormal excitement, is everywhere a preparation for the diviner's office. Everywhere, too, this excitement is ascribed to the possessing ghost, demon, or divinity, and the words uttered are his. Of the inspired Fijian priest, Williams says:—

"All his words and actions are considered as no longer his own, but those of the deity who has entered into him * * * While giving the answer, the priest's eyes stand out and roll as in a frenzy, his voice is unnatural, his face pale, his lips livid, his breathing depressed, and his entire appearance like that of a furious madman"

And just the same constituents of the belief are shown by the Santals. Starving many days the Santal priest brings on a state of half wildness. He then answers questions through the power of the possessing god. And in the case named by Sherwill, this god was "formerly a chief amongst them"

The views of the semi-civilized and civilized need mention only to show their kinship. As represented by Homer, "the gods maintain an intercourse with men as part of the ordinary course of their providence, and this intercourse consists principally in revelations of the divine will, and espe-

cially of future events, made to men by oracular voices," etc. When reminded of this, we perceive that there is likeness in nature, though some unlikeness in form, between the utterances of the Greek oracle and those of the Zulu Inyanga, to whom the ancestral ghost says—"You will not speak with the people; they will be told by us everything they come to enquire about." Along with greater deviation in non-essentials, there have remained the same essentials in the notions entertained throughout Christendom, beginning with the "inspired writers," whose words were supposed to be those of an indwelling holy spirit, and ending with the Pope, who says his infallible divinations have a like origin.

§ 132. Inevitably there comes a further development of these ideas. When the ghost of an enemy has entered a man's body, can it not be driven out? Can it not be frightened away, or the body be made untenable? Or if this cannot otherwise be done, can it not be done by supernatural aid? If some men are possessed to their hurt by spirits of evil, while others are possessed to their benefit by friendly spirits, as powerful or more powerful, is it not possible by the help of the good spirits to undo the mischief done by the bad ones—perhaps to conquer and expel them? This possibility is reasonably to be inferred. Hence exorcism.

With the belief that derangements of mind and body are caused by indwelling demons, there has everywhere gone the belief that these demons may be ejected, either with, or without, the help of superior demons. The medicine-man of the savage is primarily an exorcist. What Rowlatt tells us of the Mishmis, that, in illness, a priest is sent for to drive away the evil spirit, is told us directly or by implication in hosts of instances. Where a friendly supernatural agent is not invoked to aid, the method is that of making the body of the patient so disagreeable a residence that the demon will not remain in it. In some cases very heroic

modes of doing this are adopted ; as, according to Marsden, by the Sumatrans, who, in insanity, attempt to drive away the spirit by putting the insane person into a hut, which they set fire to, leaving him to escape as he best can. Probably various other extreme measures described, including the swallowing of horrible things, and the making intolerable smells, have the purpose of disgusting the intruder. Generally, also, the exorcist tries to alarm the mischievous tenant by shouts, and gesticulations, and fearful faces. Among the Californian tribes, the doctor "squats down opposite the patient and barks at him after the manner of an enraged cur, for hours together"; and a Koniagadoctor has a female assistant who does the groaning and growling. Sometimes with other means is joined physical force. Among the Okanagans, the medicine-man "proceeds to force the evil spirit from the sick man by pressing both clenched fists with all his might in the pit of his stomach" As a type of such processes may be taken that ascribed by Herrera to the Indians of Cumana —

"If the disease increased, they said the patient was possessed with spirits, stroked all the body over, used words of enchantment, licked some joints, and sucked, saying they drew out spirits, took a twig of a certain tree, the virtue whereof none but the physician knew, tickled their own throats with it, till they vomited and bled, sighed, roared, quaked, stamped, made a thousand faces, sweated for two hours, and at last brought up a sort of thick phlegm, with a little, hard, black ball in the middle of it, which those that belonged to the sick person carried into the field, saying—'Go thy way, Devil'"

But in what we may consider the more-developed form of exorcism, one demon is employed to drive out another. The medicine-man or priest conquers the demon in the patient by the help of a demon with which he is himself possessed, or else he summons a friendly supernatural power to his aid.

Everyone knows that, in this last form, exorcism continues during civilization. In their earlier days the Hebrews employed some physical process, akin to the processes we find among savages; such as making a

dreadful stench by burning the heart and liver of a fish . by such exorcism, taught by the angel Raphael, the demon Asmodeus was driven out—fled to Egypt when he “had smelled” the smoke. But later, as in the exorcisms of Christ, the physical process was replaced by the compulsion of superior supernatural agency. In this form exorcism still exists in the Roman Catholic Church, which has specially-ordained exorcists, and it was daily practised in the Church of England down to 1550, when infants were exorcized before baptism, in the words—“I command thee, unclean spirit, in the name of the Father, of the Son, and of the Holy Ghost, that thou come out, and depart from these infants.” Occasional exorcism continued till 1665, if not later a clergyman named Ruddle, licensed to exorcize by the Bishop of Exeter, having then, according to his own account, succeeded in laying the ghost of a woman, by the use of the means appointed for dealing with demons—magic circle, “pentacle,” etc.* Nor is this all. It has been an ecclesiastical usage, lasting down to Protestant times, to exorcize the water used in divine service: a practice implying the primitive notion that invisible demons swarm everywhere around.

In this, as in other cases, we may still trace the original nature of the supernatural agent. Malicious ghosts which annoy the living because their bodies have been ill-treated, differ but little from evil spirits which vex the living by possessing them. The instance given above, clearly implies that the laying of ghosts and the exorcism of demons, are but modifications of the same thing. The Amazulu show us the two in undistinguished forms. Concerning a woman persecuted by the ghost of her dead husband, Canon Callaway tells us :—

“If it trouble her when she has gone to another man without being as yet married, if she has left her husband’s children behind, the dead

* See *Glances of the Supernatural*, vol 1, pp. 59-69.

husband follows her and asks, ' With whom have you left my children ? What are you going to do here ? Go back to my children If you do not assent I will kill you ' The spirit is at once laid in that village because it harasses the woman "

Of course, as civilization advances, the ideas and processes differentiate , so that while evil spirits, distinctly classed as enemies, are commanded or conjured, ghosts, regarded as less mischievous, are pacified by fulfilling their requests. But since the meanings of ghost, spirit, demon, devil, angel, were originally the same, we may fairly infer that what eventually became the casting out of a devil, was originally an expulsion of the malicious double of a dead man.

§ 133. Power over spirits supposed to be attained by the exorcist, grows into power used for other purposes. A medicine-man who, helped by friendly ghosts, expels the ghosts of enemies, naturally asks himself whether he may not get ghostly aid for other purposes. Can he not by such aid revenge himself on enemies, or achieve ends not else possible ? The belief that he can initiates sorcery.

A primitive form of this belief is shown us by the Kaffirs, who think " dead bodies are restored to life by bad persons, and made hobgoblins to aid them in mischief." Here we have direct identification of the familiar demon with the deceased man. When we read in Ellis's *Polynesia* the belief of the Tahitians, that sickness and death are produced by the incantations of priests, who induce the evil spirits to enter the sick ; or when we read that most misfortunes are attributed by the Austrahans to the power which hostile tribes possess over the spirits and demons which infest every corner of the land ; we recognize the same notion less specifically stated. In the fact that by Jewish writers " a necromancer is defined as one who fasts and lodges at night amongst tombs, in order that the evil spirit may come upon him ; " we have a hint of a kindred belief in an early historic race. And we recognize the connection between

these original forms of the conception and the derived forms that have survived among the more civilized.

The operations of the sorcerer, having for their primary end the gaining of power over a living person, and having for their secondary end (which eventually becomes predominant) the gaining of power over the souls of dead persons, or supernatural agents otherwise conceived, are guided by a notion which it will be instructive to consider.

Already, in § 52, it has been pointed out that before analysis has progressed somewhat, the special power or peculiar property of an object, is supposed to be present in all its parts, and to be obtained by obtaining any of its parts. This mode of thinking, we saw, led to actions which I must here re-illustrate. As further showing the idea that the qualities of any individual are appropriated by eating him, I may give the statement of Stanbridge, that when the Australians kill an infant, they feed a previously-born child with it; believing "that by its eating as much as possible of the roasted infant, it will possess the strength of both." And I may add testimonies to the still more remarkable fact, that elsewhere, dead relatives are consumed in pursuance of an allied belief. Garcilasso says of the Cucamas that "as soon as a relation died, these people assembled and ate him roasted or boiled, according as he was thin or fat." Wallace tells us that certain adjacent races, the Tariáñas and Tucáños, who drink the ashes of their relatives, "believe that thus the virtues of the deceased will be transmitted to the drinkers," and of another allied race, the Arawaks, we are told by Waitz that it was "the highest mark of honour they could pay to the dead, to drink their powdered bones mixed in water." Equally significant is a custom of the whale-fishing Koniagas. "When a whaler dies, the body is cut into small pieces and distributed among his fellow-craftsmen, each of whom, after rubbing the point of his lance upon it, dries and preserves his piece as a sort of talisman. Or the body is placed in a

distant cave, where, before setting out upon a chase, the whalers all congregate, take it out, carry it to a stream, immerse it, and then drink of the water." Moreover, the particular virtue possessed by an aggregate is not only supposed to inhere in all parts of it, but extends to whatever is associated with it. Even its appearance is regarded as a property which cannot exist apart from its other properties. Hence the dislike often shown by savages to having their portraits taken. Along with this lively representation they think there must go some part of the life. A belief like that of the Chinooks who, if photographed, "fancied that their spirit thus passed into the keeping of others, who could torment it at pleasure," or like that of the Mapuchès, who hold that possession of a portrait gives fatal power over the person represented, will be fully exemplified hereafter, under another head. For the present, it suffices to name this belief, as further showing the ways in which unanalytical conceptions of things work out.

One more way must be added. Not only with the portrait, but even with the name, there is this association. The belief betrayed by our own uncultured that some intrinsic connection exists between word and thing (a belief which even the cultured among the Greeks did not get rid of) is shown us still more distinctly by savages. From all parts of the world we get illustrations of the desire to keep a name secret. Burton remarks of the North American Indian generally, that he dislikes to disclose his name; and of South Americans, Smith tells us that the Mapuchè shows this same repugnance, under the belief that knowledge of his name gives a fatal power over him. The motive for this secrecy was clearly expressed by the Chinook who thought Kane's desire to know his name proceeded from a wish to steal it. Indeed, as Bancroft puts it, "with them the name assumes a personality; it is the shadow or spirit, or other-self, of the flesh and blood person." A kindred interpretation is shown among the Land-Dyaks, who

often change the names of their children, especially if they are sickly: "there being an idea that they will deceive the inimical spirits by following this practice." And in another direction this belief works out in the widely-prevalent repugnance to name the dead. That which Dove tells us of the Tasmanians, that they fear "pronouncing the name by which a deceased friend was known, as if his shade might thus be offended," is told us, with or without the assigned motive, by travellers from many regions.

The facts thus grouped make sufficiently clear the genesis of the sorcerer's beliefs and practices. Everywhere he proceeds by obtaining a part of his victim's body or something closely associated with his body, or else by making some representation of him, and then he does to this part, or this representation, something which he thinks is thereby done to his victim. The conception ascribed by Fitzroy to the Patagonians, who think that possession of a man's hair or nails enables the magician to work evil on him, is the general conception. New Zealanders "all dread cutting their nails" for this reason. Canon Callaway specifically states of the Amazulu, that "sorcerers are supposed to destroy their victims by taking some portion of their bodies, as hair or nails, or something that has been worn next their person, as a piece of old garment, and adding to it certain medicines, which is then buried in some secret place" Ancient Peruvian sorcerers destroyed their victims by acting on blood taken from them. Among the New Caledonians, this fatal power over any one is exercised by operating on the remnants of his meals. Probably the idea is that these remnants continue to be connected with the portions he has eaten, and that have become part of him. They believe that—

"men can create disease and death by burning what is called *Nahak*. *Nahak* means rubbish, but principally refuse of food. Everything of the kind they bury or throw into the sea, lest the disease-makers should get hold of it * * * The belief in the system of *Nahak*-burning was as

firm in the craft as out of it. If a disease-maker was ill himself, he felt sure that some one must be burning his Nahak."

Spells which originate in the belief that a representation is physically connected with the thing represented, might be exemplified from societies in all grades. Keating tells us of the Chippewas, that a sorcerer transfers a disease by making a "wooden image of his patient's enemy," piercing it to the heart, and introducing powders; and the identity of this method with methods indicated in tales of European witchcraft, needs no proof.

Turning from this simpler form of magic to the form in which supernatural agents are employed, there come the interesting questions—What connection is there between the two? And does not the second grow out of the first? Reasons exist for thinking that it does. On remembering how small a difference the primitive man recognizes between the living and the dead, we may suspect that he thinks the two may be similarly acted upon. If possessing a portion of a living man gives power over him, will not possessing a portion of a dead man give power over him too? That by some peoples the deceased is supposed to have need of all his parts, has already been shown. We saw, in § 88, that the Mexicans took care to leave his bones where he could easily find them at the resurrection; and that with the same notion a dead Peruvian's hair and nails were preserved for him in one place. According to Bastian, the like recurs, with the like assigned reason, among the Inland Negroes in Ardrah. Is there not, then, the implication that one who gets possession of such relics thereby gets power over the dead owner, as he would have done over the owner if living? Accept this implication, and the meaning of enchantments becomes clear. Habitually fire is used, and habitually the things burned or boiled are fragments of dead things, brute or human, but especially human. Speaking of Ancient Peruvians, Arriaga says that by "a certain powder ground from the bones

of the dead," a sorcerer "stupefies all in the house." In early times it was thought dangerous "to leave corpses unguarded, lest they should be mangled by the witches, who took from them the most choice ingredients composing their charms" Portions of the dead man having been the elements originally used, and such portions having repulsiveness as their most conspicuous trait, repulsive things in general naturally suggested themselves as things likely to strengthen the "hell-broth." Setting out with coercion of the dead man by the help of something belonging to him, we may see that along with the differentiation of ghosts into orders of spirits and demons, there would be certain to go differentiation of the spells and incantations. Especially if animal-souls, or the souls of metamorphosed human beings, were to be conjured, there might be looked for those strange mixtures of "eye of newt, and toe of frog," etc, which the witch-cauldron contains *

That some such relationship exists between the arts of the necromancer and these ideas of the savage, we find further reason to suspect in the supposed

* While the above passage is standing in type, there comes to me a striking verification of the inference drawn in it In a letter of thanks to Mr. Bancroft, for the first volume of his *Native Races of the Pacific States*, having implied that I greatly valued, for my own purposes, his laborious compilation, Mr Bancroft was so obliging as to send me forthwith the proofs of large parts of the remaining volumes In those of Vol III, a paragraph on p 147 describes the initiation of a shamán among the Thlinkets Going to the woods, and feeding for some weeks "only on the roots of the *panax-horridum*," he waits till "the chief of the spirits" [who is an ancestral shamán] sends him "a river-otter, in the tongue of which animal is supposed to be hid the whole power and secret of shamánism" * * * "If, however, the spirits will not visit the would-be shamán, nor give him any opportunity to get the otter-tongue as described above, the neophyte visits the tomb of a dead shamán and keeps an awful vigil over night, holding in his living mouth a finger of the dead man or one of his teeth; this constrains the spirits very powerfully to send the necessary otter."

Here, more fitly than elsewhere, I may point out that we thus get an explanation of amulets. Portions of dead men and dead animals, though not exclusively the things used as charms, are the usual things In pursuance of the notion above described, they are supposed to give the possessor some power

potency of names. The primitive notion that a name has intrinsic virtue, and the derivative notion that calling the dead by their names affects them, and may offend them, originate the necromancer's notion of invocation. Everywhere, be it in the Hebrew legend of Samuel, whose ghost asks why he has been disquieted, or in an Icelandic saga, which describes ghosts severally summoned by name as answering to the summons, we get evidence that possession of the name is supposed to give over the dead an influence like that which it is supposed to give over the living. The power acquired by knowledge of the name is again implied by such stories as the "open Sesame" of the Arabian Nights, and the alleged effect of calling the name we see in the still-extant, though now jocose, saying—"Talk of the devil and he is sure to appear."

Special interpretations aside, however, the general interpretation is sufficiently manifest. The primitive ghost—that belonged to the dead being, or some power over it, or both—that which the sorcerer employs as an instrument of coercion, is, when a talisman, held as securing the good offices of the ghost, or as a protection against it. The custom, common to many savage races, of wearing about them bones of dead relatives, has probably this meaning, which, as we saw, was the avowed meaning of the Komaga-whalers in keeping as charms bits of the flesh of a dead companion. This notion is clearly implied in the fact told us by Beecham, that "an Ashantee sovereign carried the head of his predecessor with him to battle as a charm," and the New Caledonians, who "preserve the nails and teeth of the dead as charms," show us the same notion. Races who are in danger from ferocious animals frequently use as amulets the preservable parts of such animals. Of the Damaras, Anderson says "that their amulets are generally" the teeth of lions and hyænas, entrails of animals, etc., etc., and elsewhere he describes the Namaqua-amulets as consisting "as usual of the teeth and claws of lions, hyænas, and other wild beasts, pieces of wood, bone, dried flesh and fat, roots of plants, etc." Similarly Boyle gives as follows the charms belonging to a Dyak medicine-man—Some teeth of alligators and honey bears, several boar's tusks, chips of deer horn, tangles of coloured thread, claws of some animals, and odds and ends of European articles. Evidently the preservable parts of animals take the leading place. Elsewhere the motive is specified. Enumerating the amulets of the Brazilian Indian, Spix and Martius name the "eye-teeth of ounces and monkeys," and they say the Indian thinks his amulets, among other benefits, "will protect him against the attacks of wild beasts."

theory, implying but little difference between dead and living, fosters the notion that the dead can be acted upon by arts like those which act on the living; and hence results that species of magic which, in its earlier form, is a summoning of the dead to get from them information, as the witch of Endor summons the spirit of Samuel, and in its later form is a raising of demons to help in mischief.

§ 134. Exorcism and sorcery pass insensibly into miracle. What difference exists refers less to the natures of the effects worked than to the characters of the agents working them. If the marvellous results are ascribed to a supernatural being at enmity with the observers, the art is sorcery; but if ascribed to a friendly supernatural being, the marvellous results are classed as miracles.

That this is the relation between the two, is shown in the contest between the Hebrew priests and the magicians of Egypt. From Pharaoh's point of view, Aaron was an enchanter working by the help of a spirit antagonistic to himself, while his own priests worked by the help of his favouring gods. Contrariwise, from the point of view of the Israelites, the achievements of their own leaders were divine, and those of their antagonists diabolical. But there was agreement in the beliefs that supernatural agency was employed, and that the more powerful supernatural agent had to be yielded to.

Alleged ancient miracles of another order are paralleled in their meanings by alleged miracles now wrought every day in South Africa. By the Bechuanas, missionaries are taken for another sort of rain-makers; and among the Yorubans, "an old farmer, seeing a cloud, will say to a missionary, 'please let it rain for us'" Rain being thus, in these arid regions, synonymous with blessing, we find contests between rain-doctors, or "heaven-herds," like that between Elijah and the priests of Baal. There are similar trials of strength, and kindred penalties for failure. At a

time when "the heaven was hot and dry a rain-doctor, Umkquekana, says—'let the people look at the heaven at such a time, it will rain.' * * * And when it rained, the people said—'truly, he is a doctor' * * * After that year the heaven was hard, and it did not rain. The people persecuted him exceedingly. * * * It is said they poisoned him" Habitually we find this same conception of the weather-doctor, as, in the words of Canon Callaway, "a priest to whom is entrusted the power of prevailing mediation", and habitually we find both his mediatory power and the power of the supernatural agent with whom he has influence, tested by the result. Thus in the account of his captivity among the Brazilian Indians, the old voyager, Hans Stade, saying, "God did a wonder through me," narrates how, at the request of two savages, he stopped by prayer a coming storm which threatened to hinder their fishing; and that "the savage Parwaa said—'Now I see that thou hast spoken with thy god'" pagan and Christian being thus perfectly at one in their interpretation.

The only difference of moment is the extent to which the supernatural agent who produces the miraculous effect at the instigation of the medicine-man, rain-maker, prophet, or priest, has diverged in ascribed nature from the primitive ancestral ghost.

§ 135. And now we approach another order of phenomena which has been evolving simultaneously with the orders described in this chapter and the one preceding it.

The primitive belief is that the ghosts of the dead, entering the bodies of the living, produce convulsive actions, insanity, disease, and death; and as this belief develops, these original supernatural agents conceived as causing such evils, differentiate into supernatural agents of various kinds and powers. Above, we have contemplated certain sequences of this theory of possession. Along with a belief in maleficent possession there goes a belief in beneficent posses-

sion; which is prayed for under the forms of supernatural strength, inspiration, or knowledge. Further, from the notion that if maleficent demons can enter they can be driven out, there results exorcism. And then, following the idea that demons may be expelled there comes the idea that they may be otherwise controlled—may be called to aid. whence enchantments and miracles.

But if ghosts of the dead, or derived supernatural agents otherwise classed, can thus inflict evils on men when at enmity with them, or, when amicable, can give them help and protection, will it not be wise so to behave as to gain their good-will? Several policies suggest themselves. Supposed as these souls or spirits originally are, to be like living men in their perceptions and intelligence, they may be evaded and deceived. Or, as in the procedures above described, they may be treated antagonistically—driven away and defied. Or, contrariwise, there may be adopted the course of pacifying them if angry, and pleasing them if friendly.

This last course, which originates religious observances in general, we have now to consider. We shall find that the entire aggregate of ideas and practices constituting a cult, has the same root with the aggregates of ideas and practices already described, and gradually diverges from them

CHAPTER XIX.

SACRED PLACES, TEMPLES, AND ALTARS ; SACRIFICE,
FASTING, AND PROPITIATION ; PRAISE, PRAYER, ETC.

§ 136 ON grave-stones, inscriptions often begin with the words—"Sacred to the memory of." The sacredness thus ascribed to the tomb, extends to whatever is, or has been, closely associated with the dead. The bedroom containing the corpse is entered with the least possible noise, words are uttered in low tones ; and by the subdued manner is shown a feeling which, however variable in other elements, always includes the element of awe.

This sentiment excited in us by the dead, by the place of the dead, and by the immediate belongings of the dead, while doubtless partly unlike that of the primitive man, is in essence like it. When we read of savages in general, as of the Dakotahs, that "they stand in great awe of the spirits of the dead," and that thinking men's ghosts haunt the places of death, many tribes, like the Hottentots, "leave the huts they died in standing," with all their contents untouched ; we are sufficiently shown that fear is a chief component of the sentiment. Shrinking from the chamber of death, often shown among ourselves, like aversion to going through a churchyard at night, arises partly from a vague dread. Common to uncivilized and civilized, this feeling colours all the ideas which the dead arouse.

Be this as it may, however, we have abundant proof that the place where the dead are, excites in savages an emotion

of fear ; is approached with awe , and acquires the character of sacredness. Mariner tells us that in the Tonga Islands, the cemeteries containing the great chiefs are considered sacred. We learn from Angas that when a New Zealand chief is buried in a village, the whole village becomes immediately *tapu* . no one, on pain of death, being permitted to approach it. The Tahitians, according to Cook, never repair or live in the house of one who is dead . that, and everything belonging to him, is tabooed. Food for the departed is left by New Zealanders in "sacred calabashes", in Aneiteum, where they "worship the spirits of their ancestors," the groves in which they leave offerings of food for them, are "sacred groves"; and by Ashantis, the town of Bantama "is regarded as sacred because it contains the fetish-house, which is the mausoleum of the kings of Ashanti."

Here the fact to be noted is, that this awe excited by the dead grows into a sentiment like that excited by the places and things used for religious purposes. The kinship is forced on our attention when we read such statements as that of Cook concerning the Sandwich Islanders, that the *morai* seems to be their pantheon as well as their burial-place ; and his kindred statement that the *morais* or burying-grounds of the Tahitians are also places of worship. But we shall see this relationship most clearly on tracing the genesis of temples and altars.

§ 137. Concerning the cave-inhabiting Veddahs, Bailey tells us that until very recently the dead man was left where he died : the survivors sought some other cave, leaving that in which the death occurred to the spirit of the deceased. Schweinfurth gives evidence, already named in connection with another belief, that the Bongo people could not be got to enter a certain cave which they said was haunted by the spirits of fugitives who had died in it. And in another case, Livingstone tells us that "no one dared to enter the Lohaheng, or cave, for it was the common belief that it

was the habitation of the Deity ” On recalling the fact that primitive men lived in caves at the same time that they interred their dead in them ; on adding the fact that when they ceased to use caves as residences they continued to use them as cemeteries , and on remembering, further, the general custom of carrying repeated offerings to the places where the departed lie , we see how there arises the sacred cave or cave-temple.

That the cave-temple of Egypt thus originated, is tolerably clear. In various parts of the world are found natural caverns with rude frescoes daubed on their sides , and, similarly, these artificial caverns in which some Egyptian kings were buried, had their long passages and sepulchral chambers covered with paintings. If we assume that to the preserved bodies of these kings, as to those of Egyptians generally, offerings were made ; we must infer that the sacred burial-cave had become a cave-temple. And on learning that elsewhere in Egypt are found cave-temple of a more developed kind that were not sepulchral, we may properly regard these as derivative ; for it is not to be supposed that men commenced cutting their places of worship out of the solid rock, without having a preceding habit to suggest it.

For another class of temples we have another origin caused by another mode of burial. Already reference has been made to the widely-prevalent custom of burying a dead man in his own house. The Arawaks, Schomburgk says, place the corpse in a “small corial (boat) and bury it in the hut.” Humboldt tells us that by the Guiana tribes, “a hole is dug in the hut and there the body is laid” ; and among the Creeks, the habitation of a dead warrior becomes his place of interment. Similarly in Africa. By the Fantees “the dead person is buried in his own house” ; the Dahomans bury in the deceased’s “own house or in the abode of certain ancestors” ; and there is house-burial among the Fulahs, the Bagos, and the Gold Coast people. Whether the house thus used tends to become a temple, depends on

whether it is or is not abandoned. In cases like those cited in § 117, where the survivors continue to inhabit it after one or more interments, the acquirement of the sacred character is prevented. When Landa tells us of the Central Americans of Yucatan, that, "as a rule, they abandoned the house and left it uninhabited after the burial, unless there were many people living in it who overcame the fear of death by company", we are shown the rise of the sentiment and what results from it if not checked. Hence, on reading of the Caribs that, "burying the corpse in the centre of his own dwelling" [if the master of the house] the relations "quitted the house altogether, and erected another in a distant situation"; and on reading of the Brazilian Indians that a dead man "is buried in the hut which, if he was an adult, is abandoned, and another built in its stead"; and on reading that "the ancient Peruvians frequently buried their dead in their dwellings and then removed"; the manifest implication is seen to be that the abandoned house, thus left to the ghost of the deceased, becomes a place regarded with awe. Moreover, as repeated supplies of food are commonly taken to it; and as along with offerings there go other propitiatory acts; the original dwelling-house, turned into a mortuary house, acquires the attributes of a temple.

Where house-burial is not practised, the sheltering structure raised above the grave or above the stage bearing the corpse, becomes the germ of the sacred building. Earl tells us that by the New Guinea people there is "a roof of atass erected over" the burial-place. When found by him, Cook said the Tahitians placed the bodies of their dead upon a kind of bier supported by sticks and under a roof, and the use of such a protecting roof continued to the time when Ellis described them. So, too, in Sumatra, where "a shed is built over" the grave; and so, too, in Tonga, where the burial-place includes the grave, the mound in which it is sunk, and a sort of shed over it. Of course, this shed

admits of enlargement and finish. Brooke tells us that the Dyaks in some places build monuments for the dead like houses, 18 ft. high, ornamentally carved, hollow inside, containing the goods of the departed—sword, shield, paddle, etc. When, therefore, we read in the United States Exploring Expedition that the Fijians deposit the bodies of their chiefs and persons of note in small *mbuies* or temples; we shall not err in concluding that these so-called temples are simply more-developed sheltering structures. The observances maintained in these buildings inclosing the dead, yield further proofs of their essential nature. Ellis, describing the funeral rites of a Tahitian chief, placed under a protective shed, says that the corpse was clothed, “and placed in a sitting posture, a small altar was erected before it, and offerings of fruit, food, and flowers, daily presented by the relatives, or the priest appointed to attend the body.” Here the shed has become a place of worship.

Still more clearly are we shown that the structure erected over the dead body develops into a temple, by the practices of the Peruvians. Acosta tells us that “the treasures, estates, and revenues of each Ynca king remained his after death, to maintain the chapel where his body was placed, the large number of servants and all his family dedicated to his worship.”

Nor is it among these inferior races alone that we trace this genesis of the temple out of the specially-provided house for the dead. That which early Spanish travellers tell us about the Peruvians, ancient Greek travellers tell us about the Egyptians. Cieza expresses his astonishment “to see how little the Collas cared for having large and handsome houses for the living, while they bestowed so much care on the tombs where the dead were interred”, and similarly, Diodorus, giving a reason for the meanness of the Egyptians’ dwellings as contrasted with the splendour of their tombs, says—“they call the houses of the living *inns*, because they stay in them but a little while, but the

sepulchres of the dead they call everlasting habitations." As these Egyptian tombs, like their houses in type though so superior in quality, were places in which offerings to the dead were made, they were essentially temples. Not unfrequently in the East, these mortuary structures united the characters of the cave-temple and the dwelling-house temple. As in parts of Egypt, as at Petra, as at Cyrene, so in Etruria, the tombs were arranged along a cliff "like houses in a street," and "were severally an imitation of a dwelling chamber." So, too, the tomb of Darius, cut in the rock, "is an exact reproduction" of his palace on the same scale. Just noting this variation, I may end with the remark of Mr. Fergusson, who, writing of the Chaldean temples, and indicating the likeness of the tomb of Cyrus to a temple, says "the most celebrated example of this form is as often called [by ancient writers] the tomb as the temple of Belus, and among a Turanian people the tomb and the temple may be considered as one and the same thing."

In later times there have been manifest tendencies to such a genesis of the temple, *de novo*. In the oases of the Sahara, are chapels built over the remains of marabouts, or Mahometan saints; and to these chapels the pious make pilgrimages and take offerings. Obviously, too, a chapel covering the tomb of a saint within a Roman Catholic cathedral, is a small temple within a large one. And every detached mausoleum containing the bones of a distinguished man, is visited with feelings akin to the religious, and is an incipient place of worship.

§ 138. When, from tracing the origin of the sacred chamber, be it cave, or deserted house, or special mortuary house, or temple, we proceed to trace the origin of the sacred structure within it—the altar—we come first to something intermediate. In India there are highly-developed sacred structures uniting the attributes of the two.

The grave-heap growing into the tumulus, which in-

creases in size with the dignity of the deceased, develops also from a simple mound of earth into a mound partly of stone and partly of earth, and finally into a stone structure, still solid like a mound, and still somewhat mound-shaped, but highly elaborated architecturally. Instead of a sacred edifice evolved from the sepulchral chamber, we have, in the Indian Tope, a sacred edifice evolved from the grave-heap itself. "The Tope is the lineal descendant of the tumulus," says Mr. Fergusson; or, as defined by Mr. Cunningham in his elaborate work, it is "a *regularly-built* cairn," as its name implies. Of these Indian Topes, some contain relics of Sakyá-muni, and others contain relics of his principal disciples, priests, and saints: relics only, because in the case of Sakyá-muni, parts of his remains were carried to different places, and because, in the other cases, burning of the dead having been adopted by the Indian Buddhists, "the tomb became not the receptacle of a body but of a relic." As nearly as this change of practice permits, therefore, the Tope is a tomb; and the prayers offered at Topes, the processions made round them, and the adorations paid to them (as shown in the sculptures on their own surfaces), prove that they are simply solid temples instead of hollow temples. Their kinship is further implied by the significant fact that the name given to certain of them, *Chaitiya*, means, in Sanskrit, "an altar, a temple, as well as any monument raised on the site of a funeral pile."

Returning from this special development of the grave-heap, to the grave-heap in its original form, we have first to recall the fact (§ 85) that among savages who bury, and who take supplies of food to the dead, the grave-heap is thereby made a heap on which offerings are placed. Here of earth or turf, there partly of stones, elsewhere of stones entirely, it has the same relation to offerings for the dead that an altar has to offerings for a deity.

Where corpses are supported on platforms, which also bear the refreshments provided for the dead, these platforms

become practically altars, and we have evidence that in some cases the altars used in the worship of deities are derived from them. Cook tells us that in Tahiti, the altars on which the natives place their offerings to the gods, are similar to the biers on which they place their dead. both are small stages, raised on wooden pillars, from five to seven feet high. And in the Sandwich Islands a like structure was used to support the provisions taken to the grave of one of Cook's sailors. Elsewhere, neither the grave-heap simply nor the raised stage, plays the part of a stand for offerings. Ximenez tells us of the Central Americans that "if, after the slaves had been laid in the sepulchre beside their master, any space was left, they filled it up with earth, and levelled it. They afterwards erected an altar upon the grave, a cubit high, of lime and rock, on which generally much incense was burnt, and sacrifices offered." And then, among peoples who enlarge the grave-heap, this structure carrying food and drink is placed by its side; as it is before the vast tumulus of a Chinese Emperor.

Among ancient orientals the altar had a like origin. A ceremony at one of the Egyptian festivals was "crowning the tomb of Osiris with flowers"; and in like manner they placed garlands on the sarcophagi of dead persons. Further, we read in Wilkinson that the Egyptians had altars "outside the doors of the catacombs at Thebes." Upon these altars "are carved in bas-relief the various offerings they bore, which are the same as those represented in the paintings of tombs" an illustration showing us that where it became developed into a support for offerings placed in front of the dead, the altar still bore traces of having originally been the receptacle for the dead. One more case. As made known by their earliest recorded traditions, the Hebrews show us only modified forms of their primitive habits, but though, along with their advance from the pre-pastoral state, there was probably some divergence from their original observances of burial and sacrifice,

their altars as described suggest the origin here alleged. They were either of turf, and in so far like a grave-heap, or they were of undressed stones, and in so far also like a grave-heap. Bearing in mind that, as illustrated in the use of the flint-knife for circumcision, religious usages are those which remain longest unchanged, we may suspect the cause of the restriction to undressed stones was that the use of them had persisted from the time when they formed the primitive cairn. It is true that the earliest Hebrew legends imply cave-burials, and that later burials were in artificial caves or sepulchres, but pastoral tribes, wandering over wide plains, could not constantly have buried thus. The common mode was probably that still practised by such wild Semites as the Bedouins, whose dead, Burckhardt tells us, have "stones piled over the grave," and who, Palgrave says, "make sacrifices in which sheep or camels are devoutly slaughtered at the tombs of their dead kinsmen:" the piled stones being thus clearly made an altar.

The usages of European races also yield evidence of this derivation. Here, partly from Blunt's *Dictionary of Theology*, and partly from other sources, are some of the proofs. The most ancient altar known is "a hollow chest, on the lid or *mensa* of which the Eucharist was celebrated." This form was associated with "the early Christian custom of placing the relics of martyred saints" under altars, and it is still a standing rule in the Catholic Church to enclose the relics of a saint in an altar. "Stone was ordered by councils of the fourth century, from an association of the altar with the sepulchre of Christ." Moreover, "the primitive Christians chiefly held their meetings at the tombs of the martyrs, and celebrated the mysteries of religion upon them." And to Mr Fergusson's statement, that "in mediæval Europe the sarcophagus became a stone altar," may be joined the fact that our churches still contain "altar-tombs."

Thus what we are clearly shown by the practices of primitive men, is indicated also by the practices of civilized

men. The original altar is that which supports food for the dead ; and hence its various forms—a heap of turf, a pile of stones, a raised stage, a stone coffin.

§ 139. Altars imply sacrifices ; and we pass naturally from the genesis of the one to the genesis of the other.

Already in § 84 I have exemplified at length the practice of leaving food for the dead , and I might, space permitting, double the number of examples. I might, too, illustrate the various motives shown us by various peoples—by the Lower Californians, among whom “the priest demands provisions for the spirit’s journey ;” by the Coras of Mexico, who, after a man’s death, “placed some meat upon sticks about the fields, for fear he might come for the cattle he formerly owned ;” by the Damaras, who, bringing provisions to the grave of a relation, request “him to eat and make merry,” and in return “invoke his blessing” and aid. But it is needless to do more than remind the reader that uncivilized races in general, differing however they may do in their assigned reasons, agree in making offerings of meat and drink to the dead. A truth also before illustrated (§ 85), but which, as bearing directly on the argument, it will be well to re-illustrate here, is that these offerings are repeated at intervals . in some places for a short time , in other places for a long time. Of the Nootka-Sound people we are told that “for some days after death the relatives burn salmon or venison before the tomb,” and among the Mosquito Indians, “the widow was bound to supply the grave of her husband with provisions for a year.” These are extremes between which various degrees of persistence might be placed. And when, with practices of this kind, we join such practices and interpretations as those of the Karen, who thinks himself surrounded by the spirits of the departed dead, “whom he has to appease by varied and unceasing offerings,” we cannot fail to recognize the transition from funeral gifts to religious sacrifices

The kinship becomes further manifest on observing that in both cases there are, along with offerings of the ordinary kind, festival offerings. The Karens just named as habitually making oblations, have also annual feasts for the dead, at which they ask the spirits to eat and drink. Similarly of the Bodo and Dhimals, Hodgson tells us that "at harvest home, they offer fruits and a fowl to deceased parents." Such yearly offerings, occurring in November among the natives of the Mexican Valley, who then lay animals, edibles, and flowers on the graves of their dead relatives and friends, and occurring in August among the Pueblos, who then place corn, bread, meat, etc., in the "haunts frequented by the dead," have prevailed widely: modern Chinese still exemplifying them, as they were exemplified by the ancient Peruvians and Aztecs.

Beyond the making of offerings to deceased persons for various periods after death, and beyond these annual feasts for the dead, we have the making of offerings on occasions specially suggesting them. St John tells that "when passing a burial-ground, the Sea Dyaks throw on it something they consider acceptable to the departed," and according to Anderson, the Hottentots throw an offering on passing a burial-place, and ask the protection of the spirit. In Samoa, where the spirits of the dead are supposed to roam the bush, "people in going far inland to work, would scatter food here and there as a peace-offering to them, and utter a word or two of prayer for protection." Development of funeral offerings into habitual sacrifices is carried a stage further in the practice of reserving for the dead a portion of each meal. Of the Fijians, Seeman tells us that "often when the natives eat or drink anything, they throw portions of it away, stating them to be for their departed ancestors." Malcome says of the Bhils that always when liquor is given them, they pour a libation on the ground before drinking any; and as their dead ancestors are their deities, the meaning of this practice is unmistakable. So,

too, we learn from Smith that the Araucanians spill a little of their drink, and scatter a little of their food, before eating and drinking; and, according to Drury, the Virzimbers of Madagascar, when they sit down to meals, "take a bit of meat and throw it over their heads, saying—"There's a bit for the spirit.'" Ancient historic races had like ways.

The motive for these offerings, made first to the corpse of the dead man and afterwards at his grave—the motive for these occasional feasts and for these daily shares of meals, is everywhere the same, and is often avowed. We read in Livingstone that a Berotse having a headache said, "'My father is scolding me because I do not give him any of the food I eat.' I asked him where his father was. 'Among the Barimo,' [gods] was the reply." The Kaffirs, who are described by Gardiner as attributing every untoward event to the spirit of a deceased person, and as "slaughtering a beast to propitiate its favour," show us the same thing. So do the Amazulu. "There, then, is your food," they say. "all ye spirits of our tribe, summon one another. I am not going to say, 'So-and-so, there is your food,' for you are jealous. But thou, So-and-so, who art making this man ill, call all the spirits, come all of you to eat this food"

Alike in motive and in method, this offering of food and drink to the dead man is paralleled by the offering of food and drink to a deity. Observe the points of community.

The giving of portions of meals is common to the two. Cook tells us that in the Sandwich Islands, before the priests begin a meal, they offer up a sort of prayer, and then offer some of the provisions to the deity. As with these Polynesians, so with the Homeric Greeks: "the share which is given to the gods of the wine that flows, and the flesh that smokes on the festal board," corresponds with the share cast aside by savages for the ancestral spirits.

The like is true of the larger oblations on special occasions. Sacrifices made to gau

favours or to ward off evils, are made here to ghosts and here to gods. When a Kaffir chief kills a bullock that he may thereby get the help in war of a dead ancestor, we are reminded that "King Agamemnon offered up a fat ox, of five years old, to the powerful son of Saturn" When among the Amazulu, after "an abundant harvest sometimes the head of the village dreams that it is said to him—'How is it, when you have been given so much food, that you do not give thanks?'" and when he thereupon sacrifices to the Amatongo (ghosts of the dead), his act differs in no respect from that of offering first-fruits to deities. And when at another time "he tells his dream, and says—'Let a sin-offering be sacrificed, lest the Itongo be angry and kill us,'" we are reminded of sin-offerings made among various peoples to avert divine vengeance.

There is a no less complete correspondence between the sacrifices made at fixed periods. As above shown, we find in addition to other oblations to the dead, annual oblations; and these answer to the festivals in honour of deities. Moreover, in both cases guidance by astronomical events is used.

The parallel holds also in respect of the things offered they are identical, so far as the products of different regions permit. In both cases we have oxen, goats, etc., in both cases bread and cakes occur; in both cases the local drink is given—wine where it exists, chicha among American races, beer among various African tribes; in both cases, too, we find incense used, and in both cases flowers. In short, whatever consumable commodities are most valued, down even to tobacco. As we saw above, an African chief expected to get aid by emptying his snuff-box to the gods, and among the Kaffirs, when the spirits "are invited to eat, beer and snuff are usually added." Nor is there any difference in the mode of preparation. Both to spirits and to deities we find uncooked offerings and also burnt offerings.

Yet another likeness must be named. Ghosts and gods are supposed to profit by the

sacrifices in like ways and to be similarly pleased. As given in the *Iliad*, Zeus' reason for favouring Troy is that "there my altars never lacked a due banquet and libation and savour." And in the *Odyssey*, Athena is represented as coming in person to receive the roasted heifer offered to her, and as rewarding the offerer. So that food for deities and food for ancestors, similarly utilized, has similar effects.

Lastly, we have the significant fact that in sundry cases the sacrifices to ghosts and gods coexist in undistinguishable forms. By the Sandwich Islanders provisions are placed before the dead and before images of the deities. Among the Egyptians "the offerings made to the dead were similar to the ordinary oblations in honour of the gods." The mummies were kept in closets, "out of which they were taken by the minor functionaries to a small altar, before which the priest officiated;" and on this altar they made "offerings of incense and libations, with cakes, flowers, and fruits."

There is, then, an unbroken connection between refreshments placed for the dead and religious offerings at large. The derivation of the last from the first, made sufficiently clear by the traceable gradations, is made still clearer by the maintenance of the same essential traits.

§ 140. There are reasons for suspecting that another religious observance arises incidentally along with the foregoing observances. Little as we should look for such an origin, we meet with facts suggesting that fasting, as a religious rite, is a sequence of funeral rites. Probably the practice arises in more ways than one. Involuntary as the going without food often is with the primitive man, and causing as it then does vivid dreams, it becomes a deliberately-adopted method of obtaining interviews with the spirits. Among various savage races fasting has now, as it had among the Jews of Talmudic times, this as one of its motives. In other cases it has the allied motive of bring-

ing on that preternatural excitement regarded as inspiration. But besides fastings of these kinds there is the fasting which results from making excessive provision for the dead. This, by implication, becomes an accepted mark of reverence for the dead; and finally a religious act.

In § 103, it was shown how extensive is in many cases the destruction of property, of cattle, of food, at the tomb. I have cited the fact that, as a consequence, among the Dyaks burial-rites frequently reduce survivors to poverty, and that, on the Gold Coast, "a funeral is usually absolute ruin to a poor family." If, as in some extinct American societies, everything a man had except his land went into his grave with him—if on the death of a Toda "his entire herd" of oxen was sacrificed, the implication is that his widow and children had to suffer great want. When, of the Chippewayans, we are told that "no article is spared by these unhappy men when a near relative dies"—when we learn that among the Bagos a chief's widows burn all their stores of food at his funeral; we cannot but infer lack of food as a result. And so we find it to be. Bancroft tells us that "the Indians of the Rocky Mountains burn with the deceased all his effects, and even those of his nearest relatives, so that it not unfrequently happens that a family is reduced to absolute starvation", and of the Bagos above named, Caillié says "the family of the deceased, who are ruined by this act of superstition [burning his property], are supported through the next harvest by the inhabitants of the village." Now when along with these facts, so obviously related as cause and consequence, we join the fact stated by Cruikshank, that the Gold Coast people, to their other mourning observances add fasting, as well as the fact concerning the Dahomans which Burton gives, that "the weeping relatives must fast"; we can scarcely avoid the conclusion that what is at first a natural result of great sacrifice to the dead, becomes eventually a usage signifying such sacrifice; and continues as

a usage when no longer made needful by impoverishment. We shall see the more reason for concluding this on finding that fasting was a funeral rite among extinct peoples whose attentions to the dead were elaborate. According to Landa, the Yucatanese "fasted for the sake of the dead", and the like happened among the Egyptians during the mourning for a king "a solemn fast was established". Even among the Hebrews fasting was associated with mourning dresses.

This connection of practices and ideas is strengthened by the like connection consequent on daily offerings to the dead. The habit of throwing aside a portion of each meal for the spirits, must often associate in thought sacrificing with fasting. Short of food, as the improvident savage frequently is, the giving a part of his meal to the ancestral ghosts, diminishing the little he has, entails hunger; and voluntarily-borne hunger thus becomes a vividly impressed symbol of duty to the dead. How it thence passes into the notion of duty to the gods, is well shown by the Polynesian legend concerning Maui and his brothers. Having had a great success in fishing, Maui says to them—"After I am gone, be courageous and patient; do not eat food until I return, and do not let our fish be cut up, but rather leave it until I have carried an offering to the gods for this great haul of fish. * * * I will then return, and we can cut up this fish in safety." And the story goes on to describe the catastrophe resulting from the anger of the gods, because the brothers proceeded to eat before the offering had been made.

Naturally the fasting arising in this manner, and giving occasions for self-discipline, comes to be used for self-discipline after the original purpose is forgotten. There still clings to it, however, the notion that the approval of a supernatural power is gained; and the clinging of this notion supports the inference which we otherwise find probable.

§ 141. Returning from this incidental result, introduced

parenthetically, and resuming our study of the way in which the offerings at burials develop into religious offerings, we come next to observances scarcely separable from those described above, but which yet may be conveniently grouped by themselves. I refer to propitiations in which human beings are sacrificed to the dead, and in which those who do not sacrifice themselves, sacrifice parts of themselves.

We have seen that for the immolation of human victims at funerals, there are two motives—one of them being the supply of food for the dead; and the other being the supply of attendants for service in the future life. We will glance at the two in this order. Remembering how prevalent cannibalism is among primitive men, and remembering that a man's other-self is supposed still to like the food he liked before death, we shall see that among cannibals the offering of human flesh to the dead as a propitiation, is inevitable. Those ferocious anthropophagi the Fijians, who have victims buried with them, and whose apotheosized chiefs join other gods to whom "human flesh is still the most valued offering", show us the entire series of sequences—cannibalism during life, cannibal ghosts, cannibal deities, and human sacrifices made as religious rites. So, too, was it with the ancient Mexicans. The man-eating habits of their ruling race, were accompanied by slayings of slaves, etc., at burials, as well as by slayings of prisoners before their gods, and though the immolations at graves were not, during their later times, avowedly food-offerings, yet we may suspect that they were so in earlier times, on seeing how literally a victim immolated to the god was made a food-offering—the heart being torn out, put into the mouth of the idol, and its lips anointed with the blood. When, too, Piedrahita tells us of the Chibchas that they offered men to the Spaniards as food, and when Acosta, remarking that the Chibchas were not themselves cannibals, asks "can they have believed that the Spaniards, as sons of the Sun (as they were styled by them), must take delight in the bar-

barous holocausts they offered to that star"? we may suspect that their immolations at funerals, like their immolations to the Sun, were the remains of an extinct cannibalism. Having before us such facts as that some Khonds believe the god eats the human being killed for him; that the Tahitians thought their gods fed on the spirits of the dead, and therefore provided them with such spirits by frequent slaughterings; and that the Tongans made offerings of children to their gods, who were deified chiefs, we cannot doubt that human sacrifices at graves had originally the purpose of supplying human flesh, along with other food, for the soul of the deceased, and that the sacrificing of human beings as a religious rite was a sequence. The like holds of slaying men as attendants. Already we have seen (§ 104) how common, in uncivilized and semi-civilized societies, is the killing of prisoners, and slaves, and wives, and friends, to follow the departed; and in some cases there is a repetition of the observance. Among the Mexicans additional slaves were slain on the fifth day after the burial, on the twentieth, on the fortieth, on the sixtieth, and on the eightieth days. In Dahomy there are frequent beheadings that the victims, going to the other world to serve the dead king, may carry messages from his living descendant. Human sacrifices thus repeated to propitiate the ghosts of the dead, evidently pass without break into the periodic human sacrifices that have commonly been elements in primitive religions.

In § 89 were brought together, from peoples in all parts of the world, examples of blood-offerings to the dead. Meaningless as such offerings otherwise are, they have meaning as made by primitive cannibals. That any men, in common with most ferocious brutes, should delight in drinking blood—especially the blood of their own species—is almost incredible to us. But on reading that in Australia, human flesh "is eaten raw" by "the blood-revengers"; that the Fijian chief Tanoa, cut off a cousin's arm, drank the

blood, cooked the arm, and ate it in presence of the owner; that the cannibal Vateans will exhume, cook, and eat, bodies that have been buried even more than three days, that among the Haidahs of the Pacific States, the taamish, or inspired medicine-man, "springs on the first person he meets, bites out and swallows one or more mouthfuls of the man's living flesh wherever he can fix his teeth, then rushes to another and another"; and that among the neighbouring Nootkas the medicine-man, instead of doing this, "is satisfied with what his teeth can tear from the corpses in the burial-places", we see that horrors beyond our imaginations of possibility are committed by primitive men, and, among them, the drinking of warm human blood. We may infer, indeed, that the vampyre-legends of European folk-lore, probably grew out of such facts concerning primitive cannibals the original vampyre being the supposed other-self of a ferocious savage, still seeking to satisfy his blood-sucking propensities. And we shall not doubt that those blood-offerings to the dead described in § 89, were originally, as Burton says they are now in Dahomy, "drink for the deceased". Indeed, as there is no greater difference between drinking animal-blood and drinking human blood, than there is between eating animal-flesh and eating human flesh, hesitation disappears on reading that even now, the Samoyedes delight in the warm blood of animals, and on remembering that Ulysses describes the ghosts in the Greek Hades as flocking to drink the sacrificial blood he provides for them, and as being refreshed by it. If, then, blood shed at a funeral was at first meant for the refreshment of the ghost—if when shed on subsequent occasions, as by the sanguinary Dahomans to get the aid of a dead king's ghost in war, it became a blood-offering to a supernatural being for special propitiation; it cannot be doubted that the offering of human blood to a deity with a like motive, is but a further development of the practice. The case of the Mexicans is typical. Their ruling races descended from

conquering cannibals, they had cannibal-gods whose idols were fed with human hearts; the priests, when there had not been recent sacrifices, reminded the kings that the idols "were starving with hunger," war was made, to take prisoners, "because their gods demanded something to eat," and thousands were for this reason sacrificed annually. When we add the facts that the blood of victims was separately offered, that "the Indians gave the idols, to drink, their own blood, drawn from their ears", "that the priests and dignified persons also drew blood from their legs and daubed the temples", and that "the effusion of blood was frequent and daily with some of the priests", we shall see an obvious filiation. Even in the records of ancient Eastern nations we find blood-offerings common to the two sets of rites. That self-bleedings at funerals occurred among the Hebrews, if not indigenously then by adoption from their neighbours, is proved by the fact that in Deuteronomy they are forbidden to cut themselves for the dead. And that self-bleeding was a religious ceremony among their neighbours, is proved by the fact that in propitiation of their god the prophets of Baal cut themselves "till the blood gushed out of them."

The only question is how far this kind of propitiatory offering has passed into the kind we have now to glance at—the sacrificing a part of the body as a mark of subordination. In § 89 were given many cases of mutilation as a funeral rite, and they might readily be multiplied. Among the Nateotetains of North America, a woman "cuts off one joint of a finger upon the death of a near relative. In consequence of this practice, some old women may be seen with two joints off every finger on both hands." On the death of a Salish chief, it is the custom for the bravest woman and the man who is to be the succeeding chief, to cut off portions of one another's flesh, and throw them into the fire along with meat and a root. Paralleling these funeral mutilations, we elsewhere in America find mutilations as

religious observances. Some of the Mexicans practised circumcision (or something like it), and mutilations much more serious than circumcision, in propitiation of their deities. The Guancavilcas, a Peruvian race, pulled out three teeth from each jaw of their young children, which they thought "very acceptable to their gods"; while, as we before saw, knocking out one of the front teeth is a rite at the funeral of a chief in the Sandwich Islands.

Yet a further mutilation is common to the two classes of observances. Proofs that at funerals the cutting-off of hair is habitual among savages, have been given in abundance; and it occurs also as a religious sacrifice. In the Sandwich Islands, on the occasion of the volcanic eruption of 1799, when, to appease the gods, many offerings were made in vain, we are told that at length the king Tamehameha cut off part of his own hair, which was considered sacred, and threw it into the torrent, as the most valuable offering. Daily by the Peruvians, hair was given as an act of worship. "In making an offering they pulled a hair out of their eyebrows," says Garcilasso; and Jos d'Acosta similarly describes the presentation of eyelashes or eyebrows to the deities. Even among the Greeks we trace a kindred observance. on a marriage the bride sacrificed a lock of her hair to Aphrodite.

Alike, then, in the immolation of human victims, in the offering of blood that flows from the living as well as the dying, in the offering of portions of the body, and even in the offering of hair, we see that funeral rites are paralleled by religious rites.*

§ 142. Is there no further way in which the good will of these invisible beings may be secured? If savages in general

* As it will be at least some years before I come to the division of this work treating of Ceremonial Government, I may as well here briefly indicate the conclusion concerning bodily mutilations in general, which multitudinous facts unite in supporting. All mutilations begin with the taking of trophies

think, as the Aleutian Islanders do, that the shades of the departed must be propitiated "as being able to give good and evil," will they not ask this question and find an affirmative answer? When alive their relatives were pleased by applause, and now that, though invisible, they are wandering about, often within hearing, praise will still be pleasing to them. Hence another group of observances.

In his *Native Races of the Pacific States*, Bancroft quotes from an eyewitness the account of a funeral in which a man, carrying on his back the corpse of his wife to the burial cave, expresses his sense of loss by chanting her various virtues, and is followed by others of the tribe repeating his utterances. This practice, which is in large measure the natural expression of bereavement, is a prevalent practice into which there enters also the idea of propitiation. Of the Tupis, Southey tells us that at a funeral feast, "songs were sung in praise of the dead." Among the Lower Californians, one of the honours paid to the departed is that "a quama, or priest, sings his praises", and among the Chippewas such praises are made permanent by placing

in war—trophies carried home by conquerors to prove their prowess. When the conquered man is slain, and either left behind or devoured, the trophy is of course taken without regard to the destructiveness of the mutilation, but when the conquered man is made a slave, the taking of a trophy must neither kill him nor seriously diminish his usefulness. Mutilations of captives, thus at first incident on the taking of trophies, necessarily imply marks borne by the subjugated—signs of subordination. At first distinctive of those taken in war, such marks become signs of subordination in subjected tribes, and in those who are born slaves. Having been established as badges of submission to a conqueror, and as badges of class-submission, they come into use as badges of submission to the dead, voluntarily inflicted to propitiate their ghosts. First only the ghost of ferocious departed chiefs, who were greatly feared, and thence spreading downwards, as all ceremonial observances do. In the end they become politico-ecclesiastical rites, carrying with them vague notions of submission and sacredness, after their special meanings are lost. And as happens in cases furnished by civilized life, these marks of subordination often grow into sources of pride, and acquire a decorative character. Gashes are so made as to produce admired arrangements of scars, and tattooing develops into ornamental patterns.

at the grave a post bearing "devices denoting the number of times he has been in battle, and the number of scalps he has taken" much as, among ourselves, praises are made permanent by inscriptions on tombstones. By partially-civilized American peoples, funeral laudations were much more elaborated. Palacio tells us that in San Salvador "they chanted the lineage and deeds of the dead" for four days and nights, and we learn from P. Simon, that the Chibchas "sang dirges and the great achievements of the deceased." So, too, in describing Peruvian obsequies, Cieza says they traverse the village "declaring in their songs, the deeds of the dead chief." Like observances occur in Polynesia. Ellis states that on the occasion of a death in Tahiti, there were "elegiac ballads, prepared by the bards, and recited for the consolation of the family." We trace the same practice in Africa. According to Caillié, the Mandingoes, at a burial, deliver a eulogium on the departed; and by the great historic race in Africa, the like usage was developed in a degree proportionate to the elaboration of their social life. Not only did the Egyptians sing commemorative hymns on the occasion of a king's death, but kindred praises were general at deaths. There were hired mourners to enumerate the deceased's virtues, and when an ancient Egyptian of rank was deposited in his tomb, the priest read from a papyrus an account of his good deeds, and the multitude joined in praising him—uttered something like responses.

In many cases eulogies do not end with the funeral. Heriot remarks of the Brazilian Indians, that they "sing in honour of their dead as often as they pass near their graves." So, too, we read in Bancroft that "for a long time after a death, relatives repair daily at sunrise and sunset to the vicinity of the grave to sing songs of mourning and praise." Garcilasso tells us that in Peru, for a month after death, "they loudly shouted out the deeds of the late Ynca in war, and the good he had done

to the provinces * * * After the first month they did the same every fortnight, at each phase of the moon, and this went on the whole year," and Prescott says that "bards and minstrels were appointed to chronicle his achievements, and their songs continued to be rehearsed at high festivals."

The motive parallels the religious motive. By the Amazulu these praises of the dead are repeated for the avowed purpose of gaining favours or escaping punishments. Answering the reproaches of his brother's angry ghost, a Zulu says—"I do call on you, and laud you by your laud-giving names." Again, "if there is illness in the village, the eldest son lauds him [the father] with the laud-giving names which he gained when fighting with the enemy, and at the same time lauds all the other Amatongo" [ancestral ghosts]. Further, there is an ascribed love of praise. After a good harvest, for which the people suppose themselves indebted to the spirits, the chief of the village is prompted to an act of worship by dreaming that a spirit says to him—"How is it, when you have been given so much food, that you do not give thanks?" And then we have also proof that in their desire for praise, these ancestral ghosts are jealous ghosts. Canon Callaway shows us that when, by a diviner, it has been determined which ancestral ghost has inflicted disease, this ghost is singled out for eulogy. Here is the statement of a Zulu named Umpengula Mbanda.—

"Therefore he is called upon first, and it is said, 'So-and-so, son of So-and-so,' he being lauded by his laud-giving names, then they proceed to his father, and he too is mentioned in connection with the disease, and so in time they come to the last, and so there is an end, when it is said, 'Ye people of Gwala, who did so-and-so,' (his great deeds being mentioned), 'come all of you.'"

So that, beginning with eulogy of the dead as a funeral rite, passing to praises repeated for a time, then to praises both occasional and periodic that are established, we rise to the characteristics of religious praises. Moreover, the

two are alike in the ascribed demand for them by supernatural beings; in the nature of them as narrating great deeds; and in the motive for them as a means of obtaining benefits or avoiding evils.

§ 143 Yet another parallelism follows in immediate connection with the foregoing. Along with praises of the dead there go prayers to them. Livingstone tells us that the Banyai "pray to departed chiefs and relatives," and we learn from Reade that in Equatorial Africa, in times of distress the people go to the forest and cry to the spirits of those who have passed away. The Amazulu, whose motive for praises we have just seen, join prayers with their sacrifices. One of them says —

"The owner of the bullock having prayed to the Amatongo, saying, 'There is your bullock, ye spirits of our people,' and as he prays naming grandfathers and grandmothers who are dead, saying, 'There is your food, I pray for a healthy body, that I may live comfortably, and thou, So-and-so, treat me with mercy, and thou, So-and-so,' mentioning by name all of their family who are dead "

Similarly with the Veddahs. They think themselves guarded by the spirits of "their ancestors and their children," and "in every calamity, in every want, they call on them for aid." They "call on their deceased ancestors by name 'Come, and partake of this! Give us maintenance, as you did when living!'" "According to Schoolcraft, a Dakotah, when going hunting, utters the prayer—"Spirits or ghosts, have mercy on me, and show me where I can find a deer." Turner, describing the Vateans, who "worship the spirits of their ancestors," says "they pray to them over the kava-bowl, for health and prosperity;" and, describing the adjacent New Caledonians, he says that, sacrificing first-fruits to their dead and deified chiefs, the living chief prays aloud thus—"Compassionate father, here is some food for you; eat it; be kind to us on account of it."

Only in the supposed origin or nature of the supernatural being prayed to, do prayers like these differ from

the prayers of more civilized races to their divinities. In the *Iliad*, Chryses, Apollo's priest, is represented as saying— "O Sminthus, if ever I have roofed thy graceful temple, or if, moreover, at any time I have burned to thee the fat thighs of bulls or of goats, accomplish this entreaty for me. Let the Greeks pay for my tears, by thy arrows." So, too, Rameses, calling upon Ammon for aid in battle, reminds him of the 30,000 bulls he has sacrificed to him. This request for help in return for good things given, is in essentials perfectly like the requests above quoted. Between the Trojan or Egyptian, and the Zulu or New Caledonian, there is no difference in feeling or idea.

Of course, along with mental evolution there go modifications in the prayers, as in the conceptions associated with them. The Hebrew prophets, who in later times represent the Hebrew God as not delighting in the odour of offerings, have evidently advanced far enough to abandon that gross kind of religious bribery which asks material benefits proportionate to material sacrifices; though it is manifest from the denunciations of these prophets, that the Hebrew people at large had not dropped the primitive beliefs and practices. But while the notion of the partially civilized is not the same in form as the notion of the uncivilized, it is the same in essence. The mediæval knight who, praying for aid to the Virgin or to a saint, promises a chapel if he is delivered, adopts the same policy as does the savage who bargains with the ancestral ghost to exchange protection for provision.

§ 144. There are sundry other parallelisms which I cannot spare space to exhibit in full. A paraphrase only can be devoted to each.

LIVINGSTONE tells us that the East Africans believe "the spirits of the departed know what those they have left behind them are doing, and are pleased or not, according as their deeds are good or evil," and we learn from SCHOOLCRAFT that during the death-lament the Dakotahs ad-

dress the spirit of the departed promising to behave well. Here reprobation of the ancestral ghost is feared, just as among civilized races, divine reprobation is feared, and approval is sought with kindred motives.

There is evidence, too, of repentance caused by supposed ghostly reprobation. Concerning the ideas and feelings of the Turkomans, Vámbéry tells us that "no greater punishment can befall a living man, than to be accused before the shade of his departed father or ancestor. This is done by planting a lance upon the top of the grave. * * * No sooner did Oraz perceive the lance fixed upon the high Yoska of his grandfather, when in the silence of the following night he led the horse back to the tent of the Mollah and tied it to its former place. This act of restitution, as he himself told me, will pain him for a long time to come. But it is better to lie in the black earth than to have disturbed the repose of one's ancestors."

We read in Morgan's account of the Iroquois that "a prominent part of the ceremonial mourning for Sachems consisted in the repetition of their ancient laws." In this we trace an analogy to the repetition of divine injunctions as a religious observance.

The lighting of a fire at the grave for the benefit of the deceased, we found to be a not infrequent funeral rite; and in some cases the fire was kept alight, or re-lighted, for a long period. Joining these facts with the fact that lamps were kept burning in Egyptian tombs, as also in the sepulchres of the Romans, we see that maintenance of a sacred fire in a temple again exemplifies the development of funeral rites into religious rites.

Expressions of grief spontaneously arising from those who have lost a relative, naturally characterize funerals, and grow into funeral rites: sometimes, in advanced societies, being swollen by the cries of hired mourners. It was thus with the ancient Egyptians, and with the ancient Egyptians wailing was also a religious rite. Once a year,

they offered first-fruits on the altar of Isis with "doleful lamentations." At Busiris, which was the alleged burial-place of Osiris, there was an annual festival at which the votaries having fasted and put on mourning dresses, uttered a lament round a burnt-offering the death of Osiris being the subject of the lament. Adherents to the theory of nature-myths of course find a symbolic meaning for this observance; but to others it will appear very significant that this further likeness between funeral rites and religious rites, occurred among people who sacrificed so elaborately to their ordinary dead, and who were characterized by the unparalleled persistence of their customs.

Along with dislike to disclosure of his name, which the savage thinks will put him in the power of one who learns it, there habitually goes dislike to name the dead the exercise of the implied power over them, being supposed to excite their anger. So strong is this feeling among the Malagasy, that Drury says "they account it a crime to mention them [the dead] by the names they had when living" Similarly, by various semi-civilized races, the calling of deities by their true names has been interdicted or considered improper. It is so among the Hindus, who avoid uttering the sacred name Om, it was so with the Hebrews, whose pronunciation of the word Jehovah is not known for this reason; and Herodotus carefully avoids naming Osiris.

In Kaffir-land the grave of a chief is an asylum, and in Marner's account of the Tonga Islands we read that the cemeteries where the great chiefs are buried, have such sacredness that enemies meeting there must regard each other as friends. In this we have a beginning of the right of sanctuary, attaching to the temples of deities among more advanced peoples.

Visiting the grave to take food, to repeat praises, to ask and, implies a journey; and this journey, short if the grave is near, becomes, if the grave is far off, a pil-

grimage. That pilgrimages thus arise, proof is given by Vámbéry in describing certain predatory tribes of Turkomans, who, regarding as a martyr one of their number who is killed, adorn his grave and "make pilgrimages to the holy place, where they implore with tears of contrition the intercession of the canonized robber" Filial piety, taking a more expanded form as the ancestral ghost comes to be dominated by the ghost of the distinguished man, the pilgrimage to a relation's burial-place passes into the religious pilgrimage. Throughout, a grave continues to be the terminus—the city where Mahomet was buried as well as that in which he was born, the tomb of Baha-ed-din, regarded as a second Mahomet; the tope containing relics of Buddha, the sepulchre of Christ. Moreover, the Canterbury pilgrimage reminds us that the tombs of saints have been, and still continue to be on the Continent, the goals of pilgrimages among Christians.

One further analogy must be added. In some cases parts of the dead are swallowed by the living, who seek thus to inspire themselves with the good qualities of the dead; and we saw (§ 133) that the dead are supposed to be honoured by this act. The implied notion was shown to be associated with the further notion, that the nature of another being, inhering in all fragments of his body, inheres, too, in the unconsumed part of anything incorporated with his body; so that an operation wrought on the remnants of his food becomes an operation wrought on the food swallowed, and therefore on the swallower. Yet another implication is that between those who swallow different parts of the same food some community of nature is established. Hence such beliefs as that ascribed by Bastian to some negroes, who think that "on eating and drinking consecrated food they eat and drink the god himself"—such god being an ancestor, who has taken his share. Various ceremonies among savages are prompted by this conception, as, for instance, the choosing a totem. Among the Mosquito

Indians, "the manner of obtaining this guardian was to proceed to some secluded spot and offer up a sacrifice. with the beast or bird which thereupon appeared, in dream or in reality, a compact for life was made, by drawing blood from various parts of the body." This blood, supposed to be taken by the chosen animal, connected the two, and the animal's "life became so bound up with their own that the death of one involved that of the other." * And now mark that in these same regions this idea re-appears as a religious observance. Sahagun and Herrera describe a ceremony of the Aztecs called "eating the god" Mendieta, describing this ceremony, says—"they had also a sort of eucharist. * * * They made a sort of small idols of seeds * * * and ate them as the body or memory of their gods." As the seeds were cemented partly by the blood of sacrificed boys, as their gods were cannibal gods; as Huitzilopochtli, whose worship included this rite, was the god to whom human sacrifices were most extensive; it is clear that the aim was to establish community with him by taking blood in common. So that what, among certain of these allied American races, was a funeral rite by which survivors sought to inspire themselves with the virtues of the dead, and to bind themselves to the ghost, became, among the more civilized, modified into an observance implying inspiration by, and fealty to, one of their deities.

§ 145 Thus, evidence abundant in amount and varied in kind, justifies the statement made at the close of the last

* We here get a clue to the origin of various strange ceremonies by which men bind themselves to one another Michelet, in his *Origines du Droit Français*, writes—"Boire le sang l'un de l'autre, c'était pour ainsi dire se faire même chair. Ce symbole si expressif se trouve chez un grand nombre de peuples;" and he gives instances from various ancient races But, as we here see, this practice is not originally adopted as a symbol (no practices *begin* as symbols), but is prompted by the belief that a community of nature is thus established, and a community of power over one another Obviously the exchange of names between savages results from an allied belief

chapter. It was pointed out that the souls of the dead, conceived by savages sometimes as beneficent agents but chiefly as the causes of evils, might be variously dealt with—might be deceived, resisted, expelled, or might be treated in ways likely to secure good will and mitigate anger. It was asserted that from this last policy all religious observances take their rise. We have seen how they do so.

The original sacred locality, is the locality where the dead are, and which their ghosts are supposed to frequent; the sheltering cave, or house, or other chamber for the dead, becomes the sacred chamber or temple, and that on which offerings for the dead are placed, becomes the sacred support for offerings—the altar. Food and drink and other things laid for the dead, grow into sacrifices and libations to the gods, while immolations of victims, blood-offerings, mutilations, cuttings-off of hair, originally occurring at the grave, occur afterwards before idols and as marks of fealty to a deity. Fasting as a funeral rite, passes into fasting as a religious rite, and lamentations, too, occur under both forms. Praises of the dead, chanted at the burial and afterwards, and recurring at festivals, pass into praises forming parts of religious worship; and prayers made to the dead for aid, for blessing, for protection, become prayers made to divinities for like advantages. Ancestral ghosts supposed to cause diseases, as gods send pestilences, are similarly propitiated by special sacrifices the ascribed motives of ghosts and gods being the same in kind, and the modes of appealing to those motives the same. The parallelism runs out into various details. There is oversight of conduct by ghosts as there is by deities; there are promises of good behaviour to both, there is penitence before the one as before the other. There is a repetition of injunctions given by the dead, as there is a repetition of divine injunctions. There is a maintenance of fires at graves and in sepulchral chambers, as there is in temples. Burial-places are sometimes, like temples, used as places of refuge. A

secrecy is maintained respecting the name of the dead, as in many cases respecting the name of a god. There are pilgrimages to the graves of relatives, and pilgrimages to the graves of supposed divine persons. And in America, certain less-civilized races adopted a method of binding living with dead by seeking to participate in the qualities of the ghost, which a more civilized American race paralleled by a method of binding to a deity through a kindred ceremony for establishing community of nature.

Can so many and such varied similarities have arisen in the absence of genetic relationship? Suppose the two sets of phenomena unconnected—suppose primitive men had, as some think, the consciousness of a Universal Power whence they and all other things proceeded. What probability would there be that towards such a Power they would spontaneously perform an act like that performed by them to the dead body of a fellow savage? And if one such community would not be probable, what would be the probability of two such acts in common? what the probability of four? what of the score communities above specified? In the absence of causal relation the probability against such a correspondence would be almost infinity to one.

Again, if the two sets of rites have a common root, we may see how they come to coexist under forms differing only in their degrees of elaboration. But otherwise, how does it happen that in sundry societies the two sets of rites have been, or are, simultaneously observed in like ways? In Egypt at funerals, and afterwards in tombs, the dead were lauded and sacrificed to as their deities were lauded and sacrificed to. Every day in Mexico there were burial-oblations of food and drink, slayings of servants, offerings of flowers, just as there were daily observances of like kinds to their gods; and representative images of the dead were preserved and worshipped as were the images of the gods. Peruvians poured out human blood on sepulchres and gave it to idols; sacrificed victims to the deceased chief and victims to the

deity, cut off their hair for the dead and presented their hair to the Sun; praised and prayed to embalmed bodies, as they praised and prayed to divinities; and made obeisances to the one as to the other. If between the father regarded as ancestor and the father regarded as divinity there is no connection, this community of observances is inexplicable.

Nor is this all. Were there no such origination of religious rites out of funeral rites, it would be impossible to understand the genesis of ceremonies apparently so absurd. How could men possibly have come to think, as did the Mexicans, that a stone bowl full of human blood would please the Sun? or that the Sun would be pleased by burning incense, as the Egyptians thought? In what imaginable way were the Peruvians led to believe that the Sun was propitiated by blowing towards it hairs from their eye-brows, or why did they suppose that by doing the like towards the sea they would mitigate its anger? From what antecedent did there result so strange an idea as that of the Santals, who, worshipping "the Great Mountain," sacrifice to it beasts, flowers, and fruit? Or why should one ancient people think to please the Creator by placing on an altar bread, wine, and incense; which were the very things placed by an adjacent ancient people on altars before their mummies? The assumption that the primitive man gratuitously acts in an irrational way, is quite inadmissible. But if these religious rites, seemingly so irrational, arose from funeral rites, we no longer need wonder at their irrelevance.

We have, then, numerous lines of evidence which, converging to a focus, are by themselves enough to dissipate any doubt respecting this natural genesis of religious observances. Traceable as it is in so many ways, the development of funeral rites into worship of the dead, and eventually into religious worship, becomes clear. We shall find that it becomes still clearer on contemplating other facts under other aspects.

CHAPTER XX.

ANCESTOR-WORSHIP IN GENERAL.

§ 146 FROM various parts of the world, through witnesses of different nations and divergent beliefs, we have evidence that there exist tribes who are either wholly without ideas of supernatural beings, or whose ideas of them are extremely vague. "When Father Junípero Serra established the Mission of Dolores in 1776, the shores of San Francisco Bay were thickly populated by the Ahwashtees, Ohlones, Altahmos, Romanons, Tuolomos, and other tribes. The good Father found the field unoccupied, for, in the vocabulary of these people, there is found no word for god, angel, or devil, they held no theory of origin or destiny." This testimony, which Bancroft cites respecting the Indians of California, corresponds with the testimonies of old Spanish writers respecting some South American peoples. Garcilasso says that "the Chirihuanas and the natives of the Cape de Pasan * * * had no inclination to worship anything high or low, neither from interested motives nor from fear," Balboa mentions tribes without any religion as having been met with by Ynca Yupanqui; and Avendaño asserts that in his time the Antis had no worship whatever. Many kindred instances are given by Sir John Lubbock, and further ones will be found in Mr. Tylor's *Primitive Culture*. But I agree with Mr. Tylor that the evidence habitually implies some notion, however wavering and inconsistent, of

a reviving other-self Where this has not become a definite belief, the substance of a belief is shown by the funeral rites and by the fear of the dead.

Leaving unsettled the question whether there are men in whom dreams have not generated the notion of a wandering double, and the sequent notion that at death the wandering double has gone far away, it is unquestionably true that the first traceable conception of a supernatural being is the conception of a ghost This exists where no other idea of the same order exists, and this exists where multitudinous other ideas of the same order exist.

That belief in a surviving duplicate is produced among the savage, and is perpetually reproduced among the civilized, is a fact of great significance. Even alone it is almost enough to show that the ghost is the primitive type of supernatural being. Whatever is common to men's minds in all stages must be deeper down in thought than whatever is peculiar to men's minds in higher stages; and if the later product admits of being reached by modification and expansion of the earlier product, the implication is that it has been so reached. Recognizing this implication, we shall see how fully the facts now to be contemplated justify acceptance of it.

§ 147. As the notion of a ghost grows from that first vagueness and variableness indicated above, into a definite and avowed faith, there naturally arises the desire and the endeavour to propitiate the ghost. Hence, almost as widely spread as the belief in ghosts, may be looked for a more or less developed ancestor-worship. This we find.

Already in preceding chapters, and especially in the last, abundant indirect evidence has been given that not only in uncivilized societies constituted by races quite remote from one another in type, does ancestor-worship prevail, but that also in unallied civilized societies it exists, or has existed. Here let me add, in brief form, the direct evidence.

Where the levels of mental nature and social progress are

lowest, we usually find, along with an absence of religious ideas generally, an absence of, or very slight development of, ancestor-worship. A typical case is that of the Juáangs, a wild tribe of Bengal, who, described as having no word for god, no idea of a future state, no religious ceremonies, are also said to "have no notion of the worship of ancestors." Cook, telling us what the Fuegians were before contact with Europeans had introduced foreign ideas, said there were no appearances of religion among them, and we are not told by him or others that they were ancestor-worshippers. So far as the scanty evidence may be trusted, the like seems to be the case with the Andamanese. The Australians, whose intercourse with the civilized has doubtless affected their conceptions, but who have clearly an aboriginal belief in ghosts, show us not much persistence in ghost-propitiation. While believing in the maleficent and beneficent agency of ghosts, the Tasmanians seemingly made but few attempts to gain their good will. Among the Veddahs, indeed, though extremely low, an active if simple ancestor-worship is the sole, or almost the sole, religion; but here, contact with the more civilized Cingalese has probably been a factor.

When, however, instead of wandering groups who continually leave far behind the places where their members lie buried, we come to settled groups whose burial-places are in their midst, and among whom development of funeral rites is thus made possible, we find that ghost-propitiation becomes an established practice. All varieties of men show us this

Taking first the Negrito races, we read that "with the Fijians, as soon as beloved parents expire, they take their place amongst the family gods. Bures, or temples, are erected to their memory," etc., etc. Similarly of the Tannese, Turner says—"their general name for gods seems to be *Aemba*; that means a dead man." And the like is told us of other New Caledonian peoples.

With the more advanced Malayo-

Polynesians it is the same; save that with simple ancestor-worship there usually coexists a more developed worship of remoter ancestors, who have become deities. Sacrificing to their gods, the Tahitians also sacrifice to the spirits of departed chiefs and relatives. Kindred statements are made respecting the Sandwich Islanders, the Samoans, the Malagasy, and the Sumatrans; of which last people Marsden tells us that though "they neither worship god, devil, nor idol," yet that they "venerate almost to the point of worshipping the tombs and *manes* of their deceased ancestors."

The like holds in Africa. Livingstone testifies that the people of Angola "are constantly deprecating the wrath of departed souls;" and he says the Bambiri "pray to departed chiefs and relatives." So, according to Shooter, by the Kaffirs the spirits of the dead "are elevated in fact to the rank of deities." And kindred statements are made concerning the people of Balonda, the Wanika, the Congoese.

Quite different though they are in type, the lower Asiatic races yield us kindred illustrations. Of the Bhils, of the Bghais, of the Karens, of the Khonds, we find ancestor-worship alleged. Hunter asserts of the Santals, whose worship "is based upon the family," that "in addition to the family-god, each household worships the ghosts of its ancestors." And could we have any doubt as to how the family-god arose, it would be removed by Macpherson's statement respecting the ancestor-worship of the Khonds—"The more distinguished fathers of the tribe, of its branches, or of its sub-divisions, are all remembered by the priests, their sanctity growing with the remoteness of the period of their deaths." Of Northern Asiatics the Kirghiz and the Ostyaks yield further examples, and the Turkomans were lately instanced as showing how this worship of the dead survives along with a nominal monotheism.

Then, crossing over into America, the like phenomena are shown us from the extreme North to the uttermost South—from the Esquimaux to the

Patagonians· reaching, as we have seen, very elaborate developments among the ancient civilized races.

How in the Old World ancestor-worship prevailed, and evolved in a complex way, among the people who, in the Nile valley, first carried civilization to a high stage, has been already shown. How in the remote East, another vast society which had reached considerable heights of culture while Europe was covered by barbarians, has practised, and still practises, ancestor-worship, scarcely needs saying. And that it has all along characterized the Hindu civilization is also a fact, though a fact less familiar. With the highly-developed religious system of India, there coexists a daily re-gensis of deities from dead men. As Mr A C Lyall shows in his "Religion of an Indian Province" (*Fortnightly Review*, Feb, 1872), apotheosis is a normal process which may be there constantly witnessed. He says —

"So far as I have been able to trace back the origin of the best-known minor provincial deities, they are usually men of past generations who have earned special promotion and brevet rank among disembodied ghosts by some peculiar acts or accidents of their lives or deaths * * * The Bunjâas, a tribe much addicted to highway robbery, worship a famous bandit * * * M Raymond, the French commander who died at Hyderabad, has been there canonized after a fashion * * * Of the numerous local gods known to have been living men by far the greater portion derive from the ordinary canonization of holy personages * * * The number of shrines thus raised in Bejar alone to these anchorites and persons deceased in the odour of sanctity is large, and it is constantly increasing. Some of them have already attained the rank of temples."

And now having observed the natural genesis of ancestor-worship, its wide diffusion over the world, and its persistence among advanced races side by side with more developed forms of worship, let us turn from its external aspect to its internal aspect. Let us, so far as we can, contemplate it from the stand-point of those who practise it. Fortunately, two examples, one of its less developed form and one of its more developed form, are exhibited to us in the words of ancestor-worshippers themselves.

§ 148. Our old acquaintances the Amazulu, whose ideas have been so carefully taken down from their own lips by Canon Callaway, supply the first. Here are the slightly-varying, but similar, statements of different witnesses:—

“The ancients said that it was Unkulunkulu who gave origin to men, and everything besides, both cattle and wild animals”

“The sun and moon we referred to Unkulunkulu, together with the things of this world, and yonder heaven we referred to Unkulunkulu”

“When black men say Unkulunkulu, or Uthlanga,* or the Creator, they mean one and the same thing”

“It is said, Unkulunkulu came into being, and begat men, he gave them being, he begat them”

“He begat the ancients of long ago, they died and left their children, they begat others, then sons, they died, they begat others, thus we at length have heard about Unkulunkulu.”

“Unkulunkulu is no longer known. It is he who was the first man, he broke off in the beginning”

“Unkulunkulu told men—saying, ‘I, too, sprang from a bed of reeds’”

“Unkulunkulu was a black man, for we see that all the people from whom we sprang are black, and then hair is black”

After noting that here, and in other passages not quoted, there are some inconsistencies (as that sometimes a reed and sometimes a bed of reeds is said to be the origin of Unkulunkulu), and after noting that some variations of this primitive creed have arisen since European immigration, as is shown by one of the statements that “there were at first two women in a bed of reeds; one gave birth to a white man, and one to a black man;” let us go on to note the meaning of Unkulunkulu. Thus, Canon Callaway tells us, “expresses antiquity, age, literally, the old-old one, as we use great, in great-great-grandfather.” So that briefly stated the belief is that from a reed or bed of reeds, came the remotest ancestor who originated all other things. By the Amazulu, however, this remotest ancestor is but

* Canon Callaway tells us that “*Uthlanga* is a reed, strictly speaking, one which is capable of ‘stooling,’ throwing out offsets;” and he thinks that it comes by virtue of this metaphor “to mean a source of being” We shall hereafter find good reason for thinking that the tradition originates in no such far-fetched metaphor, but in a much simpler way

nominally recognized. Propitiation is limited to their nearer ancestors who are secondary Unkulunkulus, called in some cases Onkulunkulus. The ideas concerning, and the behaviour towards, the remoter and nearer ancestors, may be gathered from the following extracts:—

“They say that Unkulunkulu, who sprang from the bed of reeds, is dead ”

“By that it began to be evident that Unkulunkulu had no longer a son who could worship him, * * * the praise-giving names of Unkulunkulu are lost ”

“All nations [*i.e.*, tribes] have their own Unkulunkulu. Each has its own ”

“Utshange is the praise-giving name of our house, he was the first man of our family,—our Unkulunkulu, who founded our house ”

“We worshipped those whom we had seen with our eyes, their death and then life amongst us ”

“All we know is that the young and the old die, and the shade departs. The Unkulunkulu of us black men is that one to whom we pray for our cattle, and worship, saying, ‘Father!’ We say, ‘Udhlamini! Uhhadebe! Umutumkulu! Uthlomo! Let me obtain what I wish, Lord! Let me not die, but live, and walk long on the earth!’ Old people see him at night in their dreams ”

Here, then, we see ancestor-worship in but a slightly-developed form—an unhistoric ancestor-worship. There have arisen no personages dominant enough to retain their distinct individualities through many generations; and to subordinate the minor traditional individualities.

§ 149. Peoples who are more settled and further advanced show us a progress. Along with worship of recent and local ancestors, there goes worship of ancestors who died at earlier dates, and who, remembered by their power or position, have acquired in the general mind a supremacy. This truth ought to need but little illustration, for the habits of ancient races, as described and implied in early records, make it familiar. As Mr Grote says—

“In the retrospective faith of a Greek, the ideas of worship and ancestry coalesced. every association of men, large or small, in whom

there existed a feeling of present union, traced back that union to some common initial progenitor, and that progenitor again was either the common god whom they worshipped, or some semi-divine being closely allied to him."

And this stage of development in which, along with worship of ancestry distinctly traced back a certain number of generations, there went a more widely-diffused worship of some to whom the relationships were lost in the far past, we find paralleled in other places; as, for example, in Peru. Sun-worship and Ynca-worship were there joined with an active local worship of forefathers. Avendaño, repeating the affirmative answers to his questions, says.—

"Each of your ancestors * * * worshipped the *marcayoco*, who is the founder or senior of the village, from whom you are sprung. He was not worshipped by the Indians of any other village, for they had another *marcayoco*"

Chiefly, however, let us remark that these settled races of America, having traditions better preserved, exhibit in their professed creeds the transformation of their remotest progenitors into deities. By the Amazulu, the traditional old-old-one, though regarded as having given origin to them and all other things, is not worshipped—he is finally dead, and his sons, who once worshipped him, are finally dead; and the worship is monopolized by those later descendants who are remembered as founders of tribes. But among these more advanced peoples of America, the most ancient men, considered as still living elsewhere, had a worship which subordinated the worship of immediate ancestors. This is well brought out by Friar Bobadilla's cross-examination of some Nicaraguans. Here are a few of the questions and answers:—

"*Fr.* Do you know who made a heaven and earth?"

"*Indian* My parents told me when I was a child that it was Tamagastad and Cipattoval. * * *

"*Fr.* Where are they?"

"*Ind* I do not know, but they are our great gods whom we call *teotes* * * *

"Fr. By whom are the *teotes* served ?

"Ind. I have heard old men say that there are people who serve them, and that the Indians who die in their houses go under the earth, and that those who die in battles go to serve the *teotes*.

"Fr. Which is better—to go under the earth or to serve the *teotes* ?

"Ind. It is better to go to serve the *teotes*, for they go there to their fathers

"Fr. But if their fathers have died in bed, how can they see them there ?

"Ind. Our fathers are these *teotes* "

Here are passages from the examination of another witness—the cazique Avagoaltegoan :—

"Fr. Who created heaven and earth, and the stars, and the moon, and man, and all the rest ?

"Ind. Tamagastad and Cipattoval ; the former is a man, and the latter a woman

"Fr. Who created that man and that woman ?

"Ind. No one, on the contrary, all men and women descend from them. * * *

"Fr. Are those gods whom you name made of flesh or wood, or of what other material ?

"Ind. They are of flesh, and are man and woman, and youths, and are always the same, and they are of brownish colour like us Indians. and they walked over the earth dressed, and ate what the Indians ate. * * *

"Fr. What do they live on now ?

"Ind. They eat what the Indians eat, for the plant (maize ?) and all other eatables came from where the *teotes* dwell "

Another witness, Tagoteyda, a priest, apparently sixty years of age, who declined to become a Christian, gave a like account of these ancestor-gods, answering questions thus :—

"Fr. Are they men ?

"Ind. They are men

"Fr. How do you know ?

"Ind. My ancestors told me

"Fr. Where are those gods of yours ?

"Ind. My ancestors told me that they are where the sun rises * * *

"Fr. Did they come to * * * your shrines to speak to you ?

"Ind. Our ancestors said that long ago they used to come and speak with them, but now they come no more.

"Fr. Do those *teotes* eat ?

"Ind. I have heard my ancestors say that they eat the blood and

hearts of men, and some birds, and we give them candlewood, incense, and resin, that is what they eat "

From other like testimonies given by the thirteen caziques, and chiefs, and priests, I will add only the following:—

"*Fr* Who sends you rain and all things ?

"*Ind* The water is sent us by Quateot, who is a man, and has father and mother, and the father is called Omeiateite, and the mother, Omeiateigoat, and those dwell * * * where the sun rises in heaven "

Pages might be filled by evidence of like meaning. What has been given shows, like the rest, that the remotest remembered ancestors have become divinities, remaining human, as all aboriginal divinities do, in physical and mental attributes, and differing only in power, that being recognized in tradition as the begetters, or causers, of existing men, they, as the only known causers of anything, come to be tacitly regarded as the causers of other things ;* and that they reside in the region whence the race came, and which, as we before saw, is the other world travelled to by the dead. The definite statements of these peoples directly imply that transformation of ancestors into deities, which we saw was indirectly implied by the growth of funeral rites into worship of the dead, and eventually into religious worship.

§ 150. It is said, however, that ancestor-worship is peculiar to the inferior races. I have seen implied, I have heard in conversation, and I have now before me in print, the statement that "no Indo-European or Semitic nation,

* While correcting the proof of this chapter, I have met with clear evidence of the way in which the inadequately-differentiated ideas and words of primitive peoples, lead to confusions of this kind. In his *Sanskrit Texts*, Dr Muir, showing the conceptions which the ancient Rishis had of the Vedic hymns as composed by themselves, groups together the various cases in which a word implying this composition is used. The several words thus used are "making," "fabricating," "begetting, or generating." Now if in such a comparatively-developed language, these words are so imperfectly specialized as to be indiscriminately applied to the same act, we may well understand how incapable under languages must be of expressing a distinction between begetting, making, and creating.

so far as we know, seems to have made a religion of worship of the dead " And the intended conclusion appears to be that these superior races, who in their earliest recorded times had higher forms of worship, were not even in their still earlier times, ancestor-worshippers.

That those who have another theory to uphold should thus interpret the evidence, is not unnatural : every hypothesis tends to assimilate facts yielding it support and to reject adverse facts. But that adherents of the Evolution-doctrine should admit, and even allege, such a profound distinction between the minds of different human races, is surprising. Those who believe in creation by manufacture, may consistently hold that Aryans and Semites were supernaturally endowed with higher conceptions than Turanians : if species of animals were separately made with fundamental differences, varieties of men may have been so too. But to assert that the human type has been evolved from lower types, and then to deny that the superior human races have been evolved, mentally as well as physically, from the inferior, and must once have had those general conceptions which the inferior still have, is a marvellous inconsistency. Even in the absence of evidence it would be startling ; and in the presence of contrary evidence it is still more startling.

If in their more advanced times the leading divisions of the Aryans habitually, along with the worship of their greater deities, worshipped ancestors, who, according to their remoteness, were regarded as divine, semi-divine, and human ; must we really infer that in the course of their progress they adopted these ideas and practices from inferior races ? On finding that by the Greeks, heroes from whom the people of each locality traced their descent, were made objects of religious rites, just as by aboriginal Peruvians and others ; shall we say that while becoming civilized they had grafted on their higher creed this lower creed ? When we recall the familiar facts that besides sacrificing to

the ghosts of their recent dead, the Romans sacrificed to the ghosts of their more ancient dead, who were the founders of their families, just as the Amazulu do at the present time ; are we to infer that while Asiatic nomads they had no such worship, but that, then worshipping only certain personalized powers of nature, they adopted the religion of less cultured peoples as they themselves became more cultured ? Such assumptions would be inadmissible even had we no indications of the original Aryan beliefs ; and are still more inadmissible on seeing what the original Aryan beliefs were. As embodied in their sacred writings, they were essentially the same as those of existing barbarians. "The heroic Indra, who delights in praise," and to whom the hymn is "chaunted at the sacrifice" hoping to impel "the well-accoutred, the loud-thundering, to succour us," is but the ancestor considerably expanded ; and from the mouth of the Zulu chief about to sacrifice, would equally well come the words of the Aryan rishi—"friends drive hither the milch cow with a new hymn." If the human derivation of Indra needs further evidence, we have it in the statement concerning an intoxicating beverage made from the sacred plant—"the soma exhilarates not Indra unless it be poured out", which is exactly the belief of an African respecting the libation of beer for an ancestral ghost. From the Rig-Veda we learn that men who by their virtues gained admission to heaven attained an existence like that of deities ; and these "ancient pious sages," who "shared in the enjoyments of the gods," were implored to be "propitious" and to protect. Still more specific are passages from the laws of Menu. We have the statement that the *manes* eat of the funeral meal ; we have the direction to the head of the family to make a daily offering to get the good will of the *manes*, and also a monthly offering. And the ideas of savages, whose superior gods are the more powerful ghosts, are undeniably paralleled in a further injunction to preserve the oblations to the *manes*, the master of the house

must commence with an offering to the gods, so that they may not appropriate what is intended for the *manes*!

Do, then, the Semitic races furnish a solitary exception? Strong evidence must be assigned before it can be admitted that they do; and no such strong evidence is forthcoming. Contrariwise, what positive facts we gather have opposite implications. Remembering that nomadic habits are unfavourable to evolution of the ghost-theory, it is manifest that if the ancient Hebrews had, like some existing peoples, not reached the conception of a permanently-existing ghost, they would, of course, have no established ancestor-worship: not because it was beneath them, but because the conditions for display of it were not fulfilled. Further, it is manifest that the silence of their legends is but a negative fact, which may be as misleading as negative facts usually are; and beyond the general reason we have special reasons for suspecting this illusiveness. For among other peoples we find traditions that give no accounts of practices which not only existed but were dominant the reason being that extraordinary occurrences only are narrated in them, and not ordinary occurrences. Interesting personal adventures form their subject-matter and not social habits, which are at best traceable by implication, and in a condensed narrative may leave no traces at all. Thus, to take a case, the legends of the Polynesians say scarcely more than the Bible does about the worship of ancestors; and yet ancestor-worship was in full activity among them.

Again, it should be remembered that the sacred books of a religion nominally professed, may give very untrue ideas concerning the actual beliefs of its professors. Two facts already named incidentally show this. The Turkomans are rigid Mahometans; and yet, making pilgrimages to the tombs of canonized robbers, they pray to their ghosts. Similarly, the acceptance of Mahometanism does not prevent the Bedouins from sacrificing at the graves of their forefathers. In both cases there is habitually done that which we should

infer could not be done, if we drew our inferences from the Koran. When, thus warned, we turn to the denunciations of the Hebrew prophets directed against forms of worship which the Hebrews had in common with other races, we are reminded that the religion embodied in the Bible differed greatly from the popular religion. Besides the idolatry persisted in notwithstanding reprobation, there was tree-worship, and the ceremonials, equally low with those of semi-civilized peoples in general, included prostitution in temples. Moreover, the association of mourning dresses with fasting, as well as the law against self-bleeding and cutting-off the hair for the dead, imply primitive funeral rites like those of ancestor-worshippers in general. Nor is this all. On making an offering of first-fruits to Jehovah, the sacrificer is required to say that he has not "given thereof for the dead"* Hence, the conclusion must be that ancestor-worship had developed as far as nomadic habits allowed, before it was repressed by a higher worship.

But whether there is or is not adequate reason for ascribing a partially-developed ancestor-worship to the Hebrews, there is evidence that it has existed, and continues to exist, among other Semitic peoples. Abundant proof is furnished by existing tribes in Arabia. In a paper entitled "*Le culte des ancêtres divinisés dans l'Yémen*," contained in the *Comptes rendus* of the French Academy, M. Lenormant, after commenting on some inscriptions, says :—

"Here, then, we have twice repeated a whole series of human persons, decidedly deceased ancestors or relations of the author of the dedication. Their names are accompanied with the titles they bore during lifetime. They are invoked by their descendants at the same time, in the same degree (rank), with the same intention, as the gods [mentioned in the same formula], being, in short, completely placed on a par with the inhabitants of heaven. * * * They incontestably are deified persons, objects of a family worship, and gods or geni in the belief of the people of their race."

Kindred evidence is furnished by the following passage from the *Essai sur l'histoire des Arabes* of M. Caussin de Perceval. Speaking of the time of Mahomet, he says —

“The greatest part of the nation [*i e*, all who were not either Jews or Christians] were pagans. * * * They had a great number of deities, each tribe and nearly each family had one which they worshipped in particular. They admitted, however, the existence of a Supreme God (Allah), with whom the other deities were powerful intercessors * * * Some believed that at death all was at an end, others believed in a resurrection and another life.”

Here are several significant implications. The fact last named reminds us of the ancient Hebrew belief, or no-belief. Further, this difference of opinion among Arabs, some of whom are stationary and some wandering, harmonizes with the suggestion above made, that nomadic habits are less favourable than the habits of a settled life to a persistent ghost-propitiation with all its sequences. Respecting the idea of a supreme deity, accompanying ancestor-worship among them, it is manifest that wandering hordes, coming in frequent contact with large, relatively-civilized peoples, would inevitably acquire it from them; as, from their European visitors, it is now acquired by savages. But that the belief so acquired is vague and superficial, is shown us by the existing Bedouins, whose Mahometanism, according to Mr Palgrave, is of the most shadowy kind, while the reality of their ancestor-worship is proved by the sacrifices they “devoutly” make at tombs. No more, then, of Semites than of Aryans can ancestor-worship be denied.

§ 151. It seems, however, that mythologists regard these observances as having a moral rather than a religious character—as not forming parts of what is properly called worship. Let us contemplate this proposed distinction under its concrete aspects.

When Nicaraguans are described as having adored the *teotes*, said by them to be the ancient men from whom they descended, we may accept the fact as it stands, for these

people were of inferior race; but when, in the *Institutes of Menu*, we read that "the sons of Maríchi and of all the other Rishis [ancient sages], who were the offspring of Menu, son of Brahmá, are called the companies of Pitris, or forefathers,"* we must understand the fatherhood not literally but metaphorically. These people were Aryans. If one of the Amazulu, sacrificing a bullock, begins by inviting "the first Itongo who is known" (oldest ancestral ghost), or in other cases is careful to name first, a ghost who is supposed to be angry because he has not been propitiated, the fact exhibits the crude ideas of a race incapable of high civilization. If, however, the *Institutes of Menu* say—"Let an offering to the gods be made at the beginning and end of the *sráuddha* it must not begin and end with an offering to ancestors, for he who begins and ends it with an oblation to the Pitris, quickly perishes with his progeny",† we must, seeing the proved capacities of the Aryan mind, distinguish between the religious sentiment prompting one part of the sacrifice, and the moral sentiment prompting the other. Negroes who, when suffering, go to the woods and cry for help to the spirits of dead relatives, show by the implied conceptions the grovelling nature of their race, and we must not confound with them those conceptions of the Iranians implied in the *Khorde Avesta*, where the souls of forefathers are called upon in prayers:‡ these express filial feeling only. Obviously, the frequent sacrifices by which the ancient Egyptians honoured their dead, namely, three "festivals of the seasons," twelve "festivals of the month," and twelve "festivals of the half-month," formed part of their religion; for were they not Turanians and ancestor-worshippers? Quite otherwise, however, must we interpret the offerings which the Romans made to their Lares, on the *calends*, *nones*, and *ides* of every month; for these were merely marks of proper respect to

* Sir W. Jones's Works, Vol. III., p. 146

† *Ibid.*, p. 147.

‡ Spiegel's translation of the *Zend Avesta*, Vol. III., p. 231.

forefathers. The act of a savage who at each meal throws aside some food and drink for the spirits of the dead, shows a wish to propitiate which was not felt by the Roman who offered a portion of each meal to his Lares. And if, on going abroad, the Roman prayed to his Lares for a happy return, he did not ascribe to them a power such as is ascribed to ghosts of relatives by the Indian or Veddah who asks their aid when he goes hunting. Still less must we suppose any similarity between the ideas of the sanguinary Mexicans, Peruvians, Chibchas, Dahomans, Ashantis, and others who immolate victims at funerals, and the ideas of those early Romans who offered up human sacrifices at tombs.* Considering that they belonged to one of the noble types of man, we must conclude that they adopted the habit from baser types around them.

What shall we say of such modes of interpretation? We may say at least this, that were he allowed equal license in dealing with facts, the feeblest dialectician might safely undertake to establish any proposition that could be named.

§ 152. How unwarranted is the assertion that the superior races have not passed through this lower cult, will be seen on remembering that down to the present time, ancestor-worship lingers among the most civilized divisions of them. Throughout Europe it still shows itself, here feebly and there with some vigour, notwithstanding the repressive influence of Christianity.

Even among Protestants the aboriginal ideas and sentiments, and some of the acts, remain traceable. I do not refer merely to the decoration of graves with flowers, reminding us of the placings of flowers on graves by ancestor-worshipping peoples who also offered flowers to their deities; for this practice, spreading with the ritualistic reaction, may be considered as part of a revived Catholicism. I refer rather to certain less obtrusive facts. Obviously,

* Smith's *Dictionary of Greek and Roman Antiquities*, pp. 559, 560.

dead parents are frequently thought of among us as approving and disapproving. Their expressed wishes acquire a sacredness which they had not during their lives. They are figured in the minds of relatives as though they knew what was being done, and as likely to be hurt by disregard of their injunctions. Occasionally a portrait will be fancied to look reproachfully on a descendant who is transgressing, and the anxiety not to disobey a dying wish certainly acts as a deterrent. Clearly, then, however indefinite their forms have become, the aboriginal notions of subordination and propitiation have not wholly disappeared.

It is, however, among the Catholic peoples of Europe that this primitive religion most distinctly shows itself. The small chapels in cemeteries which the wealthier Catholics build, are manifestly analogous to the elaborate tombs of ancient races. If erecting a chapel to the Virgin is an act of worship, then the sentiment of worship cannot be wholly absent if the erected chapel is over a dead parent. And though mostly the prayers in such chapels, or at graves, are only *for* the dead, I am told by two French Catholics that exceptionally, when a pious parent is supposed to be not in purgatory but in heaven, there are prayers *to* the dead for intercession. A French correspondent questions this; but he admits that men and women who have died in the odour of sanctity, are canonized by popular opinion and adored. "Ainsi, j'ai vu, en Bretagne, le tombeau d'un prêtre très pieux et très charitable: il était couvert de couronnes; ou s'y rendait en foule *le prier* de procurer des guérisons, de veiller sur les enfants," etc, etc. Accepting only this last statement as trustworthy, it proves that the primitive religion lingers yet.

Even clearer proof that it lingers is yielded by the still extant customs of feeding the spirits, both annually and at other times. If we read of periodic feasts for the dead among ancient nations, or among the existing Chinese, and regard such observances as parts of their ancestor-

worship; and if we learn that the feast of All Souls and various kindred observances, are still continued in various parts of Europe, both by Teutons and Celts; can we deny that an original ancestor-worship is implied by them?*

§ 153. See, then, how fully induction justifies deduction; and verifies the implication made clear in the last chapter.

Taking the aggregate of the human peoples—tribes, societies, nations—we find that nearly all of them, if not literally all, have a belief, vague and wavering or settled and distinct, in a reviving other-self of the dead man. Within this class of peoples, almost coextensive with the whole, we find a class not quite so large, by the members of which the other-self of the dead man, definitely believed in, is supposed to exist for a considerable period after death. Nearly as numerous is the class of peoples included in this, who show us ghost-propitiation, not only at the funeral, but for a subsequent interval. Then comes the narrower class contained in the last—the more settled and advanced peoples who, along with the developed belief in a ghost that permanently exists, show us a persistent ancestor-worship. Again, somewhat further restricted, though

* The following illustrative passage has been translated for me —“Roman Catholic peasants do not forget all the year round to care for the welfare of the souls of their dead. The crusts of the table are collected throughout the week, and on Saturday night are thrown into the hearth-fire, that they may serve as food for the souls during the following holy day. Any soup which drops on the table * * * is left to the poor souls. When a woman prepares the dough, she casts behind her a handful of flour, and throws a piece of dough into the furnace, when she bakes little cakes, she puts some fat into the pan and the first cake into the fire. Wood-cutters put little pieces of bread which have become too dry, upon the tree trunks all for the good of the poor souls * * *. When the time of All Souls is approaching, the same care for the deceased is shown more vividly. In every house a light is kept burning all night, the lamp is no longer filled with oil but with fat, a door, or at least a window, remains open, and the supper is left on the table, even with some additions, people go to bed earlier,—all to let the dear little angels enter without being disturbed. * * *. Such is the custom of the peasants of the Tyrol, Old Bavaria, Upper Palatinate, and German Bohemia.”—*Rochholz, Deutscher Glaube und Brauch*, I, pp. 323-4.

by no means small, we have a class of peoples whose worship of distinguished ancestors begins to subordinate that of the undistinguished. And eventually, the subordination growing decided, becomes most marked where the ancestors were the leaders of conquering races.

Even the words applied in more advanced societies to different orders of supernatural beings, indicate by their original community of meaning, that this has been the course of genesis. The fact cited above, that among the Tannese the word for a god means literally a dead man, is typical of facts everywhere found. Ghost, spirit, demon—names at first applied to the other-self without distinctions of character—come to be differently applied as ascribed differences of character arise: the shade of an enemy becomes a devil, and a friendly shade becomes a divinity, here minor and local and there expanded and general. Where the conceptions have not developed far, there are no corresponding differentiated terms, and the distinctions made by us cannot be expressed. The early Spanish missionaries in America were inconvenienced by finding that the only native word they could use for God also meant devil. In Greek, *δαίμων* and *θεός* are interchangeable. By Æschylus, Agamemnon's children are represented as appealing to their father's ghost as to a god. So, too, with the Romans. Besides the unspecialized use of *dæmon*, which means an angel or genius, good or bad, we find the unspecialized use of *deus* for god and ghost. On tombs the *manes* were called gods; and a law directs that "the rights of the *manes*-gods are to be kept sacred." Similarly with the Hebrews. Isaiah (viii. 19) thus represents himself as commanded to reject a current belief implying such identification. "And when they say unto you, 'Consult the ghost-seers and the wizards, that chirp and that mutter' should not people consult their gods, even the dead on behalf of the living?" etc. When Saul goes to consult the ghost of Samuel, the expression of the enchantress is—"I saw gods [*elohim*] ascending out of

the earth": god and ghost being thus used as equivalents.* Even down to our own day the original kinship is traceable. The statement that God is a spirit, is the application of a word which, otherwise applied, means a human soul. And only by its qualifying epithet is the meaning of the title Holy Ghost, distinguished from the meaning of ghost in general. We still describe a divine being by a word that originally meant the breath which, deserting the human body at death, was supposed to constitute the surviving part.

Do not these various evidences warrant the suspicion that from the ghost, once uniformly conceived, have arisen the variously-conceived supernatural beings? In pursuance of the law of Evolution we may infer, *à priori*, that there will take place multitudinous developments of the conceptions thus originating. The spirits of the dead, which in a primitive tribe form an ideal group the members of which are but little distinguished from one another, will grow more and more unlike. As societies become large, organized, involved, and as traditions, local and general, accumulate and complicate, these once-similar human souls, acquiring in the popular mind unlikenesses of character and importance, will differentiate until their community of nature becomes almost unrecognizable.

Expecting, then, extremely-divergent modifications of them, multiplying in thought as populations increase, ever spreading into more varied habitats, and tending continually to fill up every place in nature that can be occupied, let us now contemplate some of their most conspicuous types.

* Concerning the first of these passages, which is given as rendered by Cheyne, in his work on Isaiah, Cheyne (p 33) explains the *gods* as the spirits of the departed national heroes. Concerning the second passage the Speaker's Commentary says—"It is possible that *elohim* is here used in a general sense of a *supernatural* appearance, either angel or spirit" And concerning the word *elohim*, Kuenen remarks (I, p. 224), "There is no doubt that originally the higher beings, the objects of man's fear (*elohim*), were indicated by it [the name *elohim*], so that this name too avails as an argument in favour of a former plurality of gods."

CHAPTER XXI.

IDOL-WORSHIP AND FETICH-WORSHIP.

§ 154. Facts already named show how sacrifices to the man recently dead, pass into sacrifices to his preserved body. In § 137 we saw that to the corpse of a Tahitian chief, daily offerings were made on an altar by a priest; and the ancient Central Americans performed kindred rites before bodies dried by artificial heat. That, along with a developed system of embalming, this grew into mummy-worship, Peruvians and Egyptians have furnished proof. Here the thing to be observed is that, while believing the ghost of the dead man to have gone away, these peoples had confused notions, either that it was present in the mummy, or that the mummy was itself conscious. Among the Egyptians, this was clearly implied by the practice of sometimes placing their embalmed dead at table. The Peruvians, who by a parallel custom betrayed a like belief, also betrayed it in other ways. By some of them the dried corpse of a parent was carried round the fields that he might see the state of the crops. How the ancestor, thus recognized as present, was also recognized as exercising authority, we see in this story given by Santa Cruz. When his second sister refused to marry him, "Huayna Ccapac went with presents and offerings to the body of his father, praying him to give

her for his wife, but the dead body gave no answer, while fearful signs appeared in the heavens."

The primitive idea that any property characterizing an aggregate inheres in all parts of it, implies a corollary from this belief. The soul, present in the body of the dead man preserved entire, is also present in preserved parts of his body. Hence the faith in relics. Ellis tells us that in the Sandwich Islands, bones of the legs, arms, and sometimes the skulls, of kings and principal chiefs, are carried about by their descendants, under the belief that the spirits exercise guardianship over them. The Crees carry bones and hair of dead persons about for three years. The Caribs, and several Guana tribes, have their cleaned bones "distributed among the relatives after death." The Tasmanians show "anxiety to possess themselves of a bone from the skull or the arms of their deceased relatives." The Andamanese "widows may be seen with the skulls of their deceased partners suspended from their necks "

This belief in the power of relics leads in some cases to direct worship of them. Erskine tells us that the natives of Lifu, Loyalty Islands, who "invoked the spirits of their departed chiefs," also "preserve relics of their dead, such as a finger-nail, a tooth, a tuft of hair, * * * and pay divine homage to it." Of the New Caledonians Turner says—"In cases of sickness, and other calamities, they present offerings of food to the skulls of the departed." Moreover, we have the evidence furnished by conversation with the relic. Lander says—"In the private fetish-hut of the King Adólee, at Badagry, the skull of that monarch's father is preserved in a clay vessel placed in the earth." He "gently rebukes it if his success does not happen to answer his expectations " Similarly, Catlin describes the Mandans as placing the skulls of their dead in a circle. Each wife knows the skull of her former husband or child, "and there seldom passes a day that she does not visit it, with a dish of the best cooked food * * * There is scarcely an hour in a pleasant

day, but more or less of these women may be seen sitting or lying by the skull of their child or husband—talking to it in the most pleasant and endearing language that they can use (as they were wont to do in former days), and seemingly getting an answer back ”

Thus propitiation of the man just dead leads to propitiation of his preserved body or a preserved part of it; and the ghost is supposed to be present in the part as in the whole.

§ 155. Any one asked to imagine a transition from worship of the preserved body, or a preserved part of it, to idol-worship, would probably fail; but transitions such as imagination does not suggest, actually occur.

The object worshipped is sometimes a figure of the deceased, made partly of his remains and partly of other substances. Landa says the Yucatanese

“ cut off the heads of the ancient lords of Cocom, when they died, and, as if to cook them, cleared them from flesh, they then sawed off half of the top of the head, leaving the anterior part with the jaw-bones and teeth, and to these half-skulls they joined what they wanted in flesh with a certain cement, and made them as like as possible to those to whom they belonged, and they kept them along with the statues and the ashes All were kept in the oratories of their houses beside their idols, and were greatly revered and assiduously cared for On all their festivals they offered them food ” * * * In other cases they “ made for their fathers wooden statues,” left “ the occiput hollow,” put in ashes of the burnt body, and attached “ the skin of the occiput off the corpse.”

The Mexicans had a different method of joining some of the deceased’s substance with an effigy of him. When a dead lord had been burned, says Camargo, “ they carefully collected the ashes, and after having kneaded them with human blood, they made of them an image of the deceased, which was kept in memory of him.” And from Camargo we also learn that images of the dead were worshipped.

A transitional combination partially unlike in kind occurs: sometimes the ashes are contained in a man-

shaped receptacle of clay. Of the Yucatanese the writer above quoted states that—

“The bodies of lords and people of high position were burnt. The ashes were put in large urns and temples erected over them * * * In the case of great lords the ashes were placed in hollow clay statues.” And in yet other cases there is worship of the relics joined with the representative figure, not by inclusion but only by proximity. Thus the Mexicans, according to Gomara, “closed the box [in which some hair and the teeth of the deceased king were present] and placed above it a wooden figure shaped and adorned like the deceased.” Then they “made great offerings, and placed them where he was burnt, and before the box and figure.”

Lastly may be named the practice of the Egyptians, who, as their frescoes show, often worshipped the mummy not as exposed to view, but as inclosed in a case shaped and painted to represent the dead man.

§ 156. From these examples of transition we may turn to those in which the funeral propitiations are made to a substituted image.

The Mexicans practised cremation; and when men killed in battle were missing, they made figures of them, and after honouring these burnt them and buried the ashes. Here are extracts from Clavigero and Torquemada —

“When any of the merchants died on their journey, * * * his relations * * * formed an imperfect statue of wood to represent the deceased, to which they paid all the funeral honours which they would have done to the real dead body.”

“When some one died drowned or in any other way which excluded concrementation and required burial, they made a likeness of him and put it on the altar of idols, together with a large offering of wine and bread.”

In Africa kindred observances occur. While a deceased king of Congo is being embalmed, says Bastian, a wooden figure is set up in the palace to represent him, and is daily furnished with food and drink. Parkyns tells us that among the Abyssinians mourning takes place on the third day; and the deceased having been buried on the day of his

death, a representation of the corpse does duty instead. Of some Papuan Islanders Earl states that when the grave is filled with earth, they collect round an idol and offer provisions to it. Concerning certain Javans we learn from Raffles that after a death a feast is held, in which a man-shaped figure, supported round the body by the clothes of the deceased, plays an important part.

These practices look strange to us, but a stranger thing is that we have so soon forgotten the like practices of civilized nations. In Monstrelet's *Chronicles*, Book 1., the burial of Charles VI. of France is described thus —

"Over the coffin was an image of the late king, bearing a rich crown of gold and diamonds and holding two shields, one of gold, the other of silver, the hands had white gloves on, and the fingers were adorned with very precious rings. This image was dressed with cloth of gold," etc * * * "In this state was he solemnly carried to the church of Notre Dame"

This usage was observed in the case of princes also. Speaking of the father of the great Condé, Mme. de Motteville says—"The effigy of this prince was attended (*servit*) for three days, as was customary." forty days having been the original time during which food was supplied to such an effigy at the usual hours. Monstrelet describes a like figure used at the burial of Henry V of England; and the effigies of many English monarchs, thus honoured at their funerals, are said to have been preserved in Westminster Abbey till they decayed.

With these reminders before us, we ought to have no difficulty in understanding the primitive ideas respecting such representations. When we read that the Coast Negroes in some districts "place certain earthen images on the graves"; that the Araucanians fixed over a tomb an upright log, "rudely carved to represent the human frame", that after the deaths of New Zealand chiefs, wooden images, 20 to 40 ft. high, were erected as monuments; we cannot shut our eyes to the fact that the figure of the dead man is an incipient idol. Could we doubt, our

doubt would end on finding the figure persistently worshipped. J. d'Acosta tells us of the Peruvians that "each king had, while living, * * * a stone figure representing himself, called Guanquí [huanque]—i.e., brother. This figure was to be worshipped like the Ynca himself, during his life as well as after his death." So, too, according to Andagoya,

"When a chief died, his house and wives and servants remained as in his lifetime, and a statue of gold was made in the likeness of the chief, which was served as if it had been alive, and certain villages were set apart to provide it with clothing, and all other necessaries."

And, similarly, Cogolludo testifies that the Yucatanese "worshipped the idol of one who is said to have been one of their great captains."

§ 157. That we may understand better the feelings with which a savage looks at a representative figure, let us recall the kindred feelings produced by representations among ourselves.

When a lover kisses the miniature of his mistress, he is obviously influenced by an association between the appearance and the reality. Even more strongly do such associations sometimes act. A young lady known to me confesses that she cannot bear to sleep in a room having portraits on the walls, and this repugnance is not unparalleled. In such cases the knowledge that portraits consist of paint and canvas only, fails to expel the suggestion of something more. The vivid representation so strongly arouses the thought of a living personality, that this cannot be kept out of consciousness.

Now suppose culture absent—suppose there exist no ideas of attribute, law, cause—no distinctions between natural and unnatural, possible and impossible. This associated consciousness of a living presence will then persist. No conflict with established knowledge arising, the unresisted suggestion will become a belief.

In § 133 beliefs thus produced in savages were incidentally referred to. Here are some further examples of

them Kane states that the Chinooks think portraits supernatural, and look at them with the same ceremony as at a dead person According to Bancroft, the Okanagans "have the same aversion that has been noted on the coast" to having their portraits taken We learn from Catlin that the Mandans thought the life put into a picture was so much life taken from the original. He also says—

"They pronounced me the greatest *medicine man* in the world, for they said I had made *living beings*,—they said they could see them chiefs alive in two places—those that I had made were a *little* alive—they could see their eyes move "

Nor do more advanced races fail to supply kindred facts. Concerning the Malagasy, Ellis testifies that friends of the prince, on seeing a photograph of him, took off their hats to it and verbally saluted it

That which holds of a pictorial representation holds of a carved or sculptured one—holds even more naturally; since the carved representation being solid, approaches closer to the reality. Where the image is painted and has eyes inserted, this notion of participation in the vitality of the person imitated becomes, in the uncritical mind of the savage, very strong. Any one who remembers the horror a child shows on seeing an adult put on an ugly mask, even when the mask has been previously shown to it, may conceive the awe which a rude effigy excites in the primitive mind. The sculptured figure of the dead man arouses the thought of the actual dead man, which passes into a conviction that he is present.

§ 158. And why should it not? If the other-self can leave the living body and re-enter it—if the ghost can come back and animate afresh the dead body—if the embalmed Peruvian, presently to be resuscitated by his wandering double, was then to need his carefully-preserved hair and nails—if the soul of the Egyptian, after its trans-migrations, occupying some thousands of years, was expected

to infuse itself once more into his mummy; why should not a spirit go into an image? A living body differs more from a mummy in texture, than a mummy does from wood.

That a savage does think an effigy is inhabited we have abundant proofs. Lander, describing the Yorubans, says a mother carries for some time a wooden figure of her lost child, and when she eats, puts part of her food to its lips. The Samoides, according to Bastian, "feed the wooden images of the dead." The relatives of an Ostyak

"make a rude wooden image representing, and in honour of, the deceased, which is set up in the yurt and receives divine honours for a greater or less time as the priest directs * * * At every meal they set an offering of food before the image, and should this represent a deceased husband, the widow embraces it from time to time * * * This kind of worship of the dead lasts about three years, at the end of which time the image is burned "

Erman, who states this, adds the significant fact that the descendants of deceased priests preserve the images of their ancestors from generation to generation ;

"and, by well-contrived oracles and other arts, they manage to procure offerings for these their family penates, as abundant as those laid on the altars of the universally-acknowledged gods But that these latter also have an historical origin, that they were originally monuments of distinguished men, to which prescription and the interest of the Shamans gave by degrees an arbitrary meaning and importance, seems to me not liable to doubt "

These Ostyaks, indeed, show us unmistakably how worship of the dead man's effigy passes into worship of the divine idol; for the two are identical At each meal, placing the dishes before the household god, they wait (*i.e.*, *fast*) till "the idol, who eats invisibly, has had enough." Moreover, we are told by Bastian that when a Samoiede goes on a journey, "his relatives direct the idol towards the place to which he is gone, in order that it may look after him." How among the more advanced peoples of these regions there persists the idea that the idol of the god, developed as we have seen from the effigy of the dead man, is the re-

sidence of a conscious being, is implied by the following statement of Erman respecting the Russians of Irkutsk —

“Whatever familiarities may be permitted between the sexes, the only scruple by which the young women are infallibly contrioll'd, is a superstitious dread of being alone with their lovers in the presence of the holy images. Conscientious difficulties of this kind, however, are frequently obviated by putting these witnesses behind a curtain.”

Like beliefs are displayed by other races wholly unallied. Of the Sandwich Islanders, Ellis tells us that after a death in a family, the survivors worship “an image with which they imagine the spirit is in some way connected”, and also that “Oro, the great national idol, was generally supposed to give the responses to the priests.” Concerning the Yucatanese, Fancourt, quoting Cogolludo, says that “when the Itzaex performed any feat of valour, their idols, whom they consulted, were wont to make a reply to them”, and, quoting Villagutierre, he describes the beating of an idol said to have predicted the arrival of the Spaniards, but who had deceived them respecting the result. Even more strikingly shown is this implication in the Quiché legend. Here is an extract from Bancroft —

“And they worshipped the gods that had become stone, Tohil, Avilix, and Hacavitz, and they offered them the blood of beasts, and of birds, and pierced their own ears and shoulders in honour of these gods, and collected the blood with a sponge, and pressed it out into a cup before them * * * And these three gods, petrified, as we have told, could nevertheless resume a movable shape when they pleased, which, indeed, they often did.”

Nor is it among inferior races only that conceptions of this kind are found. In his *Histoire des Musulmans d'Espagne*, Dozy, describing the ideas and practices of the idolatrous Arabians, says—

“When Amrolcais set out to revenge the death of his father on the Beni-Asad, he stopped at the temple of the idol Dhou'l-Kholosa to make a consultation by means of the three arrows called command, prohibition, expectation. Having drawn prohibition, he recommenced drawing. But three times he drew prohibition. Thereupon he broke the arrows and throwing them into the idol's face, he shouted, ‘Wretch,

if the killed man had been thy father, thou wouldst not forbid revenging him ” ”

Of kindred beliefs in classic times, an instance is furnished by the statements respecting the so-called vocal Memnon. Among the inscriptions made by visitors on its pedestal, here is one signed Gemellus —“Once the son of Saturn, great Jove, had made thee monarch of the East; now thou art but a stone, and it is from a stone that thy voice proceeds.” Similarly with the beliefs of Christian writers, implied by the miracles they ascribe to certain apostles in the Apocryphal Gospels. “Coming into India, the Apostle Bartholomew entered a temple, in which was the idol As-taroath.” * * * At the wish of the king, he agrees to expel the demon, and next day engages in a dialogue with him * * * “Then the apostle commands him—‘If thou dost not wish to be hurled into the abyss, come forth from the image and break it, and go forth into the desert’ ”—*S. Bartholomæi, caps. 1-6.*

The proofs, then, are many and conclusive. Unable to dissociate appearance from reality, the savage, thinking the effigy of the dead man is inhabited by his ghost, propitiates it accordingly, and as the effigy of the dead man develops into the idol of the god, the sacrifices to it are made under a kindred belief in a spiritual resident.

§ 159. What degree of likeness to a human being suffices to suggest the presence of a human soul? These images the savage makes are very rude. The carved post he sticks on a grave, or the little stone image he hangs round his neck instead of an actual relic of a relative, resembles but remotely the human being, and not at all the individual commemorated. Still it suffices. And considering how easily the primitive mind, unchecked by scepticism, accepts the slightest suggestion, we may expect that even smaller likenesses will suffice. A dead tree outstretching its remaining arms in a strange way, or a rock of which the profile

seen against the sky recalls a face, will arouse the idea of a human inhabitant. Merely noting, however, that such accidental similarities aid in extending to various objects the notion of resident ghosts, let us observe the more potent causes of fetichistic beliefs.

In § 54 we saw how the discovery of plants and animals imbedded in rock, prepares the mind to suspect animation in certain inanimate things. Here is a fossil shell; there are the remains of a fish changed into stone. If, as a silicified tree shows, wood retaining all its fibrous appearance may become flint, may not a man also turn into this dense substance? And if the dry, hard body of a mummy may be entered by its soul—if a wooden image may be so too; may not souls be present in petrified masses that look like parts of men? See these bones which have been dug up—heavy, stony, but in shape sufficiently like human bones to deceive the savage; as, in fact, such bones have, in past times, habitually deceived the civilized, leading to stories of giant races. What is to be thought of them? Are they not, like other human remains, frequented by the doubles to which they once belonged? Will they not some day be re-animated?

Be this or be it not the origin of reverence for stones, this reverence is certainly in some cases accompanied by the belief that they were once men, and that they will eventually revive as men. Already I have quoted from Piedrahita the fact that “the Laches worshipped every stone as a god, as they said that they had all been men” Arriaga says the Peruvians “worship certain heights and mountains, and very large stones * * * saying that they were once men.” Avendaño argued with them thus:—

“Your wise men say that of old in Purmupacha there were men, and now we see with our own eyes that they are stones, or hills, or rocks, or islands of the sea. * * * If these huacas originally were men, and had a father and mother, like ourselves, and then Contumnacocha has turned them into stones, they are worthless”

Such stones stand in the same relation to the inhabiting

ghosts that mummies do : witness Arriaga's statement that the Marçayoc who is worshipped as the patron of the village, "is sometimes a stone and sometimes a mummy" They also stand in the same relation to ghosts that idols do : witness the statement of Montesinos, that "the Ynca Rocca caused to be thrown from the mountain [a certain idol]. * * * They say that a parrot flew out of it and entered another stone, which is still shown in the valley. The Indians have greatly honoured it since that time, and still worship it." And this belief is definitely expressed in Molina's account of a certain reaction towards the old creed in 1560, when native priests, describing the ancestral ghosts or huacas, as enraged with those who had been baptized, said "the times of the Yncas would be restored, and the huacas would not enter into stones or fountains to speak, but would be incorporated in men whom they would cause to speak" Similarly of the Coast Negroes Winterbottom tells us that in some towns, when a person dies, a stone is taken to a certain house provided; and among the Bulloms, women "make occasional sacrifices and offerings of rice to the stones which are preserved in memory of the dead. They prostrate themselves before these" Such facts, if they do not imply the belief that the dead man has become a stone, imply the belief that his ghost is present in it

This last instance introduces us to another mode in which fetichistic conceptions arise. Already the practices of sorcerers have familiarized us with the primitive belief that each person's nature inheres not only in all parts of his body, but in his dress and the things he has used. Probably the interpretation of odour has led to this belief. If the breath is the spirit or other-self, is not this invisible emanation which permeates a man's clothing, and by which he may be traced, also a part of his other-self? Various derivations show us this connexion of ideas. *Perfume* and *fume* coming from a word applied to smoke or vapour, are thus brought into relation with the visible vapour of

breath. *Exhalation* is that which breathes out of. In Latin, *nidor* was applicable alike to a steam and a smell, and the German *duft*, used for a delicate odour, originally meant vapour. Just as we now speak of the "breath of flowers" as equivalent to their fragrance, so, in early speech, did men associate the smell with the expired air, which was identified with the soul. Have we not, indeed, ourselves come to use the word *spirit*, similarly having reference to breath, for the odorous steam which distils from a thing; and may not the savage therefore naturally regard the spirit as having entered that to which the odour clings? However this may be, we find clear proof that not dress only, but even stones, are supposed to become permeated by this invisible emanation, existing either as breath or as odour. According to Ximenez, when a lord died in Vera Paz, "the first thing they did after his death was to put a precious stone in his mouth. Others say that they did this, not after his death, but in his last moments. The object of it was that the stone receive his soul." A kindred notion is implied by a practice of the Mexicans, who, along with a man's remains, "put a gem of more or less value, which they said would serve him in place of a heart in the other world"· heart and soul being, with some of these American peoples, convertible terms. Under another form the same idea meets us among the New Zealanders. Mr. White, who in *Te Raou* embodies many New Zealand superstitions, narrates a discussion concerning the ghosts of the dead, in which he represents an old man as saying—

"Are not all things the offspring of the gods? Is not the kumara the god that hid himself from fear? Do you not eat the kumara? Are not fish another god who went into the water? Do you not eat fish? Are not the birds also gods? Were not the gods spirits [*i e*, ghosts of men]? Then, why are you not afraid of the things that you eat? Anything cooked sends the spirit into the stones on which they are cooked. Then, why do old people eat out of a hangi, and off the stones which hold the spirit of the food cooked on them?"

Thus the original belief is that as a dead body, or a

mummy, or an effigy, may be entered by a spirit; so, too, may a shapeless stone. All the evidence goes to show that adoration of inanimate objects thus possessed by ghosts, is really adoration of the indwelling ghosts, and that the powers ascribed to such objects are the powers ascribed to such ghosts.

§ 160 Naturally this notion, once established, develops in all directions. A ready explanation of everything remarkable is furnished. When ghosts, accumulating and losing their once-remembered individualities, are thought of as a multitude of invisible beings—when they are here conceived as elbowed by the inhabitants of the house, here as swarming in the nooks of the forests, here as so numerous that a thing cannot be thrown aside without danger of hitting one; it happens, inevitably, that being everywhere at hand they become the assigned causes of all unfamiliar things. Instances are furnished by every race.

In Africa the Bulloms regard with awe, as implying spirit-agency, “whatever appears to them strange or uncommon.” By the Congo people, unknown shells are called “God’s children”, and the Negroes in Nuffi [on the Niger], astonished at the size of a European vessel, worshipped it. The like holds in Polynesia. Ellis tells us that a sledge left by Cook or his companions was worshipped by the natives. A cocoa-nut tree in Fiji, which divided in two branches, “was consequently regarded with great veneration.” Similarly in America. Schoolcraft says supernaturalness is alleged of “anything which a Dakotah cannot comprehend”; and that by the Mandans all unusual things are deemed supernatural. Of the Chippewas Buchanan tells us that “if they do not understand anything, they immediately say, *it is a spirit*”; and the same notion was dominant among the ancient Peruvians, who, according to J. d’Acosta, “worshipped anything in nature which seemed to them notable and

different from others, as recognizing in it some particular deity."

Thus the unusualness which makes an object a fetich, is supposed to imply an indwelling ghost—an agent without which deviation from the ordinary would be unaccountable. There is no tendency gratuitously to ascribe duality of nature; but only when there is an unfamiliar appearance, or motion, or sound, or change, in a thing, does there arise this idea of a possessing spirit. Simon tells us of the Chirchbas that many worshipped "at lakes, rivulets, rocks, hills, and other places of striking or unusual aspect" saying that by certain occurrences "the demon had given a sign that they should worship him at such places." The implication here so manifest, that one of the haunting invisible beings is the object of adoration, is again shown us by the Hindus Mr. Lyall, in the essay lately quoted, though he accepts that current view of fetichism which I think erroneous, so states the results of his Indian experiences that they perfectly harmonize with the interpretation here given. He says—

"It is not difficult to perceive how this original downright adoration of queer-looking objects is modified by passing into the higher order of imaginative superstition. First, the stone is the abode of some spirit, its curious shape or situation betraying *possession*. Next, this strange form or aspect argues some *design*, or handwork, of supernatural beings," etc, etc

So that indirect evidence from all sides converges to the conclusion that the worship of a fetich is the worship of a special soul supposed to have taken up its abode in it; which soul, in common with supernatural agents at large, is originally the double of a dead man

§ 161. But we need not rest with indirect evidence of this. Direct evidence is abundant.

Many pages back, facts were given showing that originally the fetich is nothing but the ghost. While, in § 58, we saw that the Abipones, fearing the ghost, thought "the echo was its voice"; we saw that the African, when asked

why he made an offering to the echo, answered—"Did you not hear the fetich?" In East Africa, Burton describes the fetich-huts as having food and beer placed in them "to propitiate the ghosts" The Coast Negroes who, worshipping the dead, perform "pilgrimages to their graves to make oblations and sacrifices," who mould clay figures of their departed chiefs, who sometimes have tubes leading down to the buried corpses, through which they daily pour libations, show us by various associated observances that the fetich is the residence of the ghost According to Winterbottom, the natives round Sierra Leone "seldom or never drink spirits, wine, etc., without spilling a little of it upon the ground, and wetting the grugru or fetich"; Cruikshank mentions certain foods abstained from according to the direction of the fetich; Beecham says the fetich-house forms a sort of sanctuary, Bastian names a fetich-man who used ventriloquism in announcing the oracles,—facts all implying notions like those which elsewhere go along with ghost-worship Lander, speaking of a village on the Niger where there was a carved image, the fetich, says—"We were desirous to roast our bullock under him, that he might enjoy the savoury smell", and in Dahomey "the roads, villages, and houses," according to Wilmot, "are filled with fetich-images and sacrifices to the fetich." Whether the fetich is a bundle of things belonging to a relative who has died, or an effigy of this deceased person, or an idol that has lost historic individuality, or some other object, the resident spirit is nothing but a modification of the ancestral ghost, deviating more or less according to circumstances. The certainty of this conclusion is best shown by the summarized statement Beecham makes.

"The fetiches are believed to be spiritual, intelligent beings, who make the remarkable objects of nature their residence, or enter occasionally into the images and other artificial representations, which have been duly consecrated by certain ceremonies It is the belief of the people that the fetiches not unfrequently render themselves visible to

mortals. * * * They believe that these fetiches are of both sexes, and that they require food."

And if this occasional visibility, this need for food, and this difference of sex, are not enough to show the original human nature of the fetich, it is conclusively shown by the following statement of Bastian about the Congo people.

"The natives say that the great fetich of Bamba lives in the bush, where no man sees him, or can see him. When he dies, the fetich-priests carefully collect his bones in order to revive them, and nourish them till they again acquire flesh and blood."

So that the fetich, besides otherwise answering to the ghost, answers as being expected to resume, in like manner, the original bodily form.

§ 162. We will now draw a corollary from this interpretation of fetichism, and observe how completely it harmonizes with the facts

Evidence has been given that various low types of men have either no ideas of a revival after death, or vague and wavering ideas: the conception of a ghost is undeveloped. If, as contended above, the worship of the fetich is the worship of an indwelling ghost, or a supernatural being derived from the ghost; it follows that the fetich-theory, being dependent on the ghost-theory, must succeed it in order of time. Absent where there is no ghost-theory, fetichism will arise after the ghost-theory has arisen. That it does this, proofs are abundant.

Of the Indian Hill-tribes may be named, as about the lowest known, the Juáangs, who, with no word for a supernatural being, with no idea of another life, with no ancestor-worship, have also no fetichism: an accompanying absence of witchcraft being also noteworthy. The Andaman Islanders, classed with the most degraded of mankind, who are without a "notion of their own origin," and without a notion "of a future existence," are also without fetichism. so, at least, may be concluded from the silence

of those who describe them. Of the Fuegians, too, among whom no appearances of religion were found by Cook, no fetichism is alleged. Nor have those very inferior savages the Australians, though believing in ghosts, reached the stage at which the ghost-theory originates this derivative theory they do not propitiate inanimate objects. Their now-extinct neighbours, too, the Tasmanians, like them in grade, were like them in this. And even the Veddahs, who, thinking the souls of their relatives are everywhere around, have a dominant ancestor-worship, but whose intelligence and social state are extremely low, do not show us this extension of the ghost-theory.

The implications of a doctrine do not occur to the utterly stupid; but they become obvious to those who begin to think. Hence, in proportion as the reasoning faculty is good, will be the number of erroneous conclusions drawn from erroneous premises. As was pointed out in §§ 57 and 96, it is not savages devoid of intelligence, but highly intelligent savages, such as the Fijians, who believe that a man has two souls, his shadow and his reflection; and who accept the inference that, as objects have shadows, they too must have souls.

The various African peoples, even taken by themselves, suffice to show that fetichism arises only when a certain stage of mental and social evolution has been reached. No fetichism is alleged of the Bushmen; and of the African races whose state is known to us, the Bushmen are the lowest. The Damaras, among whom, according to Andersson, intelligence is "an unusual phenomenon," and whose stupidity Galton exemplifies so vividly, have not drawn from their feebly-marked ghost-beliefs the inferences whence fetichism arises. Galton says—"of the fetich superstition there is no trace." But fetichism meets us among the more advanced African races—the Congo people, the Inland Negroes, the Coast Negroes, the Dahomans, the Ashantees. We find it rampant where there are fortified towns, well-organized governments,

large standing armies, prisons, police, and sumptuary laws, considerable division of labour, periodical markets, regular shops, and all the appliances showing some progress in civilization.

Still more conspicuously is this relation exhibited in America. We do not read of fetichism among the rude Chirihuanas of ancient Peru; but among the civilized Peruvians it was immenscly elaborated. Both before and after the Ynca conquest, "they worshipped herbs, plants, flowers, all kinds of trees, high hills, great rocks, and the chunks in them, hollow caves, pebbles, and small stones of different colours." And then, if we ask where fetichism has culminated, we are referred to a people whose civilization, older in date than our own, has created vast cities, elaborate industries, a highly-structured language, great poems, subtle philosophies. In India,

"A woman adores the basket which serves to bring on to hold her necessaries, and offers sacrifices to it, as well as to the rice-mill, and other implements that assist her in her household labours. A carpenter does the like homage to his hatchet, his adze, and other tools, and likewise offers sacrifices to them. A Brahman does so to the style with which he is going to write, a soldier to the arms he is to use in the field, a mason to his trowel."

And this statement of Dubois, quoted by Sir John Lubbock, coincides with that of Mr. Lyall in his "Religion of an Indian Province." "Not only," he says, "does the husbandman pray to his plough, the fisher to his net, the weaver to his loom; but the scribe adores his pen, and the banker his account-books."

How untenable is the idea that fetichism comes first among superstitions, will now be manifest. Suppose the facts reversed. Suppose that by Juáangs, Andamanese, Fuegians, Australians, Tasmanians, and Bushmen, the worship of inanimate objects was carried to the greatest extent; that among tribes a little advanced in intelligence and social state, it was somewhat restricted; that it went on decreasing as knowledge and civilization increased; and that in highly-developed societies, such as those of ancient Peru

and modern India, it became inconspicuous. Should we not say that the statement was conclusively proved? Clearly, then, as the facts happen to be exactly the opposite, the statement is conclusively disproved.

§ 163. Induction having shown the untruth of this current dogma, we are now prepared for seeing how entirely deduction discredits it.

Made on the strength of evidence furnished by early travellers, whose contact was chiefly with races partially advanced and even semi-civilized, the assertion that fetichism is primordial gained possession of men's minds; and prepossession being nine points of belief, it has held its ground with scarcely a question. I had myself accepted it, though, as I remember, with some vague dissatisfaction, probably arising from inability to see how so strange an interpretation arose. This vague dissatisfaction passed into scepticism on becoming better acquainted with the ideas of savages. Tabulated evidence presented by the lowest races, changed scepticism into disbelief, and thought has made it manifest that the statement, disproved *à posteriori*, is contrary to *à priori* probability.

In the chapter on "The Ideas of the Animate and Inanimate," it was shown that progressing intelligence gives increasing power to discriminate the living from the not-living, that the higher animals rarely confound the one with the other, and that to suppose the animal which is far above the rest in sagacity, gratuitously confuses the two, is unwarrantable. Were the fetichistic conception primordial, it would be possible to show how the evolution of thought necessitated its antecedence, whereas this, so far as I see, is impossible. Consider the mind of the savage as delineated in foregoing chapters—unspeculative, uncritical, incapable of generalizing, and with scarcely any notions save those yielded by the perceptions. Ask what could lead him to think of an inanimate object as having in it

some existence besides that which his senses acquaint him with? He has no words for separate properties, much less a word for property in general, and if he cannot even conceive a property apart from an aggregate presenting it—cannot conceive colour apart from particular objects coloured—how can he imagine a second invisible entity as causing the actions of the visible entity? He has neither that tendency to think which must precede such a conception, nor has he the mental power required to grasp such a conception. Only, as the progress of thought evolves the ghost-theory, does there arise, when circumstances suggest it, this idea of an animate agent in an inanimate object. I say advisedly—when circumstances suggest it; for at first he does not gratuitously assume spiritual possession. Something anomalous is requisite to suggest the presence of a spirit. And if afterwards, in higher stages of progress, he extends such interpretations, so as to think of multitudinous common things as possessed, the antecedent is an accumulation of ghosts and derived spirits swarming everywhere.

That fetichism is a sequence of the ghost-theory might, indeed, be suspected from the evidence which our own people have furnished, and still furnish. I do not refer chiefly to the still-extant doctrine of the real presence; nor to the creed implied by the obsolete practice of exorcizing the water used in baptism; nor to the conceptions of those who in past times thought objects which behaved strangely were “possessed,” though they did not assume possession to account for the ordinary powers of objects. But I refer chiefly to the evidence which modern spiritualists yield us. If tables turn and chairs move about without visible agency, spirits are the assumed agents. In presence of some action not understood, there is a revival of the fetichistic interpretation. the cause is a supernatural being, and this supernatural being is the ghost.

§ 164. Propitiation of the dead, which, originating funeral

rites, develops into the observances constituting worship in general, has thus, among its other divergent results, idol-worship and fetich-worship. All stages in the genesis of these are traceable.

There are sacrifices to the recently-dead body, to the dried body or mummy, to the relics; there are sacrifices to a figure made partly of the relics and partly of other substances; there are sacrifices to a figure placed on a box containing the relics; there are sacrifices to a figure placed on the grave containing the remains. And as thus combined, the remains and the representative figure have been in kindred ways sacrificed to by civilized races—Egyptians, Etruscans, Romans, down even to mediæval Christians; for does not the adored figure of a saint above his tomb, undeniably correspond to the carved effigy which the savage places on a grave and propitiates?

That this representative image of the dead man grows into the idol of the deity, we have clear proof. The worship, persistent for various periods, becomes in some cases permanent; and then constitutes the established idolatry of the savage, which evolves finally into elaborate religious ceremonies performed before awe-inspiring statues in magnificent temples.

Further, from the notion of the primitive man that along with likeness in aspect there goes likeness in nature, comes a belief that the effigy is inhabited by the ghost; and from this there descends the notion that deities enter idols and occasionally speak from them.

Between idol-worship and fetich-worship there is no break. In Africa the visible fetich is often a man-shaped figure, sometimes a figure less like a man, resembling "nothing so much as one of our scare-crows"; and sometimes a thing human only in its connexions, having the character of an amulet: the faith in which, as we saw (§ 133), grows from a faith in relics and therefore arises from the ghost-theory.

That the worship of things which are strange in size, shape, aspect, or behaviour, is

derivative, and goes along with belief in the presence of a spirit originally human, facts make clear. This extension, becoming marked as we see it does where mental evolution has made considerable progress, accompanies the growth and elaboration of the ghost-theory—occurs where ghosts are supposed to be ever-present causes of diseases, cures, accidents, benefits, etc.; and exhibits the unchecked application of an hypothesis which seems to explain everything.

Beliefs thus originating are aided by the idea that shadows are souls. As we before saw (§ 96), this idea into which primitive men are naturally betrayed, they extend to other shadows than those cast by their own bodies. As they advance, reason forces this implication on them; and acceptance of it strengthens those conceptions of object-souls otherwise reached.

Proof that the thing worshipped in the remarkable object is a ghost, is in some cases joined with proof that it is an ancestral ghost. The *huacas* of the Peruvians, which were both the objects themselves and the ghosts supposed to be in them and to speak from them, were their forefathers. Garcilasso tells us that “an Indian is not looked upon as honourable unless he is descended from a fountain, river, or lake (or even the sea); or from a wild animal, such as a bear, lion, tiger, eagle, or the bird they call *cuntur* [condor], or some other bird of prey; or from a mountain, cave, or forest”; and, as Cieza shows us, these *huacas* whence they descended, they worshipped.

That idolatry and fetichism are aberrant developments of ancestor-worship, thus made, I think, abundantly evident, will become more evident still on passing to the kindred groups of facts which now follow.

CHAPTER XXII.

ANIMAL-WORSHIP.

§ 165. In the chapter on "Primitive Ideas," it was pointed out that in the animal kingdom the metamorphoses which actually occur, are, at first sight, more marvellous than many which are wrongly supposed to occur—that the contrasts between a maggot and a fly, an egg and a bird, a tadpole and a frog, are greater than the contrasts between a child and a puppy, a man and a bull.

Encouraged, then, by the changes he daily sees, and not deterred by such cognitions as have been established by experiences accumulating for thousands of years, the savage yields unresistingly to anything which suggests that a creature has assumed a different shape. In some cases the supposed change is from one of the lower animals into another ; as in Brazil, where, Burton says, "the people universally believe that the humming-bird is transmutable into the humming-bird hawk-moth." But mostly the transformation is of men into animals, or of animals into men.

In glancing at the evidence supplied by all races, we will first take a number of examples, and then consider the interpretations.

§ 166. The belief that human beings disguise themselves as brutes, is in some cases specified generally ; as concerning the Thinkets of North America, who "will kill a bear

only in case of great necessity, for the bear is supposed to be a man that has taken the shape of an animal." And the converse idea is current in its general form among the Karens, who think "the waters are inhabited by beings whose proper form is that of dragons [? crocodiles], but that occasionally appear as men, and who take wives of the children of men" Usually, however, only certain classes of men and women, distinguished by power of some kind, or believed to be so, have this ability ascribed to them.

Regarding all special skill as supernatural, sundry African peoples think the blacksmith (who ranks next to the medicine-man) works by spirit-agency; and in Abyssinia "blacksmiths are supposed able to turn themselves into hyænas and other animals." So strong is this belief that it infects even European residents: Wilkinson instances a traveller who asserted that he had seen the metamorphosis.

More commonly it is the sorcerers exclusively of whom this power is alleged. Campbell tells us that the Khonds believe "witches have the faculty of transforming themselves into tigers." According to Winterbottom, in case of "an alligator seizing upon a child whilst bathing in the river, or a leopard carrying off a goat," the Bulloms "are of opinion that it is not a real leopard or alligator which has committed the depredation, but a witch under one of these assumed forms." Mendieta says that among the Mexicans "there were sorcerers and witches who were thought to transform themselves into animals." Describing the people of Honduras, Herrera tells us they "punished sorcerers that did mischief; and some of them are said to have ranged on the mountains like tigers or lions, killing men, till they were taken and hanged." Both from Piedrahita and P. Simon, we learn that the Chibchas "pretended to have great sorcerers who might be transformed into lions, bears, and tigers, and devour men like these animals."

To chiefs as well as to sorcerers this faculty is in some places ascribed. Of the Tunja Thomagata, one

of the Chibcha rulers, Piedrahita says he was believed "to have had a long tail, after the manner of a lion or a tiger, which he dragged on the soil." Africans supply kindred illustrations. Here is one, to which, however, I have unfortunately lost the reference.

"There are also a great many lions and hyænas, and there is no check upon the increase of the former, for the people, believing that the souls of their chiefs enter into them, never attempt to kill them, they even believe that a chief may metamorphose himself into a lion, kill any one he chooses, and then return to the human form, therefore, when they see one they commence clapping their hands, which is the usual mode of salutation "

In some cases this supposed power extends to the chief's relatives. Schweinfurth narrates how, when at Gallabat, having shot a hyæna, he was reproached by the sheik because his, the sheik's, mother, was a "hyæna-woman "

Instead of a change of form there is, in other cases, possession. We saw how the primitive dream-theory, with its wandering double which deserts the body and re-enters it, brings, among many sequences, the belief that wandering doubles can enter other bodies than their own; and the last chapter exhibited some wide extensions of this doctrine. representative figures, and even inanimate objects not having human shapes, being supposed permeable by human ghosts. Naturally, then, animals are included among the things men's souls go into. Livingstone tells us that at Tete, the people believe "that while persons are still living they may enter into lions and alligators, and then return again to their own bodies." Brett says the Guiana tribes think jaguars "are possessed by the spirits of men."

Of course, along with beliefs in possession by the doubles of living persons, there go beliefs in possession by the doubles of dead persons. Marsden says the Sumatrans imagine that

"tigers in general are actuated with the spirits of departed men, and no

consideration will prevail on a countryman to catch or to wound one, but in self-defence, or immediately after the act of destroying a friend "

Among existing American races the Apaches, according to Bancroft, "hold that every rattlesnake contains the soul of a bad man or is an emissary of the Evil Spirit"; and the same writer gives testimony that "the Californians round San Diego will not eat the flesh of large game, believing such animals are inhabited by the souls of generations of people that have died ages ago · 'eater of venison!' is a term of reproach among them." With the ancient American races it was the same. As one out of many statements, may be given this made by Clavigero —

"The people of Tlascala believed that the souls of persons of rank went, after their death, to inhabit the bodies of beautiful and sweet singing birds, and those of the nobler quadrupeds, while the souls of inferior persons were supposed to pass into weazles, beetles," etc

There are like beliefs among Africans. When Hutchinson doubted the assertion that men's souls pass into monkeys and crocodiles, he was answered—"It be Calabar fash, and white man no saby anything about it."

Passing over many modifications and developments of this general notion—passing over, too, those filiations upon it which early civilizations show us, such as the Scripture story of the expelled devils who entered into the swine, and the were-wolf legends of the middle ages; let us turn to the interpretations. We have seen that his experiences prepare the savage for supposing metamorphoses, if circumstances suggest them; but we must not assume him to suppose them without suggestive circumstances. What, then, are these? We shall find three kinds; leading to three groups of allied, but partially-different, beliefs.

§ 167. "The Amatongo are snakes," say the Zulus; and, as we have repeatedly seen, Amatongo is their name for ancestral ghosts. But now why have these people fixed on snakes as being transformed ancestors? Some extracts

from Canon Callaway's cross-examination, I place in an order that will prepare the reader for the answer.

"The snakes into which men turn are not many, they are distinct and well known. They are the black Imamba, and the green Imamba, which is called Inyandezulu. Chiefs turn into these. Common people turn into the Umthlwazi."

"These snakes are known to be human beings when they enter a hut, they do not usually enter by the doorway. Perhaps they enter when no one is there, and go to the upper part of the hut, and stay there coiled up."

"If the snake has a scar on the side, some one who knew a certain dead man of that place who also had such a scar, comes forward and says, 'It is So-and-so. Do you not see the scar on his side?' It is left alone, and they go to sleep."

"Those which are men are known by their frequenting huts, and by their not eating mice, and by their not being frightened at the noise of men."

Now join with these statements the facts set forth in §§ 110, 137, and the genesis of this belief becomes manifest. All over the world there prevails the idea that the ghost of the dead man haunts the old home. What, then, is meant by the coming of these snakes into the huts? Are they not returned relations? Do not the individual marks they sometimes bear yield proof? Just as the Australian settler who had a bent arm, was concluded to be the other-self of the dead native who had a bent arm (§ 92), so here, the scar common to the man and the snake proves identity. When, therefore, the Zulus say—"Neither does a snake that is an Itongo excite fear in men. * * * When men see it, it is as though it said as they look at it, 'Be not afraid. It is I';" we are shown that recognition of the snake as a human being come back in another shape, is suggested by several circumstances: frequentation of the house being the chief.

This recognition is utilized and confirmed by the diviners. As is said by some who, through them, sought supernatural aid—"We wondered that we should continually hear the spirits, which we could not see, speaking in the wattles, and telling us many things without our

seeing them." And elsewhere it is said—"The voice was like that of a very little child, it cannot speak aloud, for it speaks above, among the wattles of the hut." The trick is obvious. Practising ventriloquism, the diviner makes the replies of the ancestral ghost seem to come from places in which these house-haunting snakes conceal themselves.

Though most men are supposed to turn into the harmless snakes which frequent huts, some turn into the "imamba which frequents open places." Concerning this we read—"The imamba is said especially to be chiefs"; it is "a poisonous snake," and has "the stare of an enemy, which makes one afraid." Whence we may conclude that as special bodily marks suggest identity with individual men who bore kindred marks, so traits of behaviour and character in snakes of a certain species, lead to identification with a class of individuals. This conclusion we shall presently find verified elsewhere in Africa

Among the Amazulu, this belief in the return of ancestors disguised as serpents, has not led to worship of serpents as such: propitiation of them is mingled with propitiation of ancestral ghosts in an indefinite way. Other peoples, too, present us with kindred ideas, probably generated in like manner, which have not assumed distinctly religious forms; as witness the statement of Nuño de Guzman, that "in the province of Culiacan tamed serpents were found in the dwellings of the natives, which they feared and venerated." But, carrying with us the clue thus given, we find that along with a developed cult and advanced arts, a definite serpent-worship results. Ophiolatry prevails especially in hot countries; and in hot countries certain kinds of ophidia secrete themselves in dark corners of rooms, and even in beds. India supplies us with a clear case. Serpent-gods are there abundant; and the serpent habitually sculptured as a god, is the cobra. Either in its natural form or united to a human body, the cobra with expanded hood in attitude to strike, is adored in numerous temples. And then, on

inquiry, we learn that the cobra is one of the commonest intruders in houses.*

The like happens with some other house-haunting creatures. In many countries lizards are often found indoors; and among the Amazulu, the "Isalukazana, a kind of lizard," is the form supposed to be taken by old women. Whether the belief of the New Zealanders that the spirits of their ancestors re-visit them as lizards, refers to lizards which enter houses, I have failed to learn. Then,

too, we have the wasp, which is one of the animate shapes supposed to be taken by the dead among the Amazulu; and the wasp is an insect which often joins the domestic circle to share the food on the table. Alongside this belief I may place a curious passage from the flood-legend of the Babylonians. Hasisadra, describing his sacrifice after the deluge, says—"The gods collected at its burning, the gods collected at its good burning, the gods, like flies, over the sacrifice gathered."

Once more, of house-haunting creatures similarly regarded, we have the dove. Describing animal-worship among the ancients, Mr. McLennan remarks that "the dove, in fact * * * is almost as great a god as the serpent". The still-extant symbolism of Christianity shows us the surviving effect of this belief in the ghostly character of the dove.

§ 168. An allied group of ideas will now be readily understood. Where house-burial prevails, the ghost has but one

* Since writing the above I have re-read Mr. McLennan's essay on Animal-worship, and in it find a confirmatory fact. I have italicized the significant words "To support the superstition there are two articles in the treaty made and sanctioned by Her Britannic Majesty's Consul for the Bight of Biafra and the Island of Fernando Po, on November 17, 1856, one of which runs thus.—'Article 12 That long detention having heretofore occurred in trade, and much angry feeling having been excited in the natives from the destruction by white men, in their ignorance, of a certain species of boa constrictor *that visits the houses*, and which is ju-ju, or sacred, to the Brassmen, it is hereby forbidden to all British subjects to harm or destroy any such snake' "

place to haunt, but otherwise it is believed now to re-visit the habitation it has left, and now to be where the body lies. If, then, creatures which frequent houses are supposed to be metamorphosed ancestors, will not creatures habitually found with corpses be also considered as animal forms assumed by the dead? That they will, we may conclude; and that they are, we have proofs.

The prevalence of cave-burial among early peoples everywhere, has been shown. What animals habitually occur in these dark recesses? Above all others, those which shun the light—bats and owls. Where there are no forests with hollow trees, etc., crevices and caverns are the most available places for these night-flying creatures; and often in such places they are very numerous. An explorer of the Egyptian cave known from its embalmed contents as “Crocodilopolis,” tells me that he was nearly suffocated with the dust raised by the bats, whose flight nearly put out the torches. Now join with these facts the following passage from the Izdubar legends translated by Mr Smith.—

“Return we from Hades, the land of my knowledge, from the house of the departed, the seat of the god Irkalla, from the house within which is no exit, from the road the course of which never returns, from the place within which they long for light—the place where dust is their nourishment and their food mud Its chiefs also, like birds, are clothed with wings”

In Mr. Talbot’s rendering of the legend of the descent of Ishtar, Hades, described as “a cavern of great rocks,” is again said to be “the abode of darkness and famine, where earth is their food: their nourishment clay: light is not seen: in darkness they dwell: ghosts, like birds, flutter their wings.” Amid minor differences, the agreement respecting the cavernous nature of the place, its gloom, its lack of food, its dust, and the winged structure of its inhabitants, clearly points to the development of the burial-cave with its tenanting creatures, into Hades with its inhabiting spirits. In the same way that, as we before saw, Sheol, meaning primarily a cave, expanded into an under-

world, so here we see that the winged creatures habitually found along with the corpses in the cave, and supposed to be the transformed dead, originated the winged ghosts who inhabit the under-world. Verification is yielded by an already-quoted passage from the Bible, where sorcerers, referred to as consulting the dead, are said to chirp like bats: the explanation being that their arts, akin to those of the Zulu diviners lately named, had a like aim. "These ventriloquists," says Delitzsch, "imitated the chirping of bats, which was supposed to proceed from the shades of Hades." Further verification comes to us from the legends of the Greeks, which grew up in adjacent regions under like conditions. The spirits of the dead are said by them to squeak and to gibber.*

The experience that bats were found in caves with great constancy and in large numbers, while owls more generally frequented the dark corners of deserted houses, may have tended to differentiate the associated conceptions. "Mother of ruins" is an Arabian name for the owl. Mr. Talbot, in translations embodying the religious beliefs of the Assyrians, has the following prayer uttered on a man's death:—"Like a bird may it [the soul] fly to a lofty place!" With this we may join the fact that, in common with modern Arabs, their ancient kindred preferred to bury in high places when they could. We may also join with it the following passage from M. de Perceval's *Essai sur l'histoire des Arabes*.—

"In their opinion the soul, when leaving the body, fled away in the form of a certain bird called *Hâma* or *Sada* (a sort of owl), and did not cease flying round the tomb and crying pitifully"

The Egyptians also, along with kindred experiences of

* Since the above was put in type I have met with a confirmatory fact in the *Travels in the Philippines* of Mr F Jagor. Before Europeans conquered them, the people had the ideas and customs of ancestor-worship highly developed; and they anciently buried in caves, which were held sacred. Mr Jagor narrates his visit to a cavern "tenanted by multitudes of bats." The few natives who dared enter, "were in a state of great agitation, and were careful first to enjoin upon each other the respect to be observed by them towards *Calapuntun*"—literally "lord of the bats"—P 169

these cave-hiding and ruin-haunting creatures, had a belief in winged souls. Moreover, their symbol of eternity, placed over the doorways of sacred buildings (they called tombs "everlasting habitations") was winged. Thus it seems likely that by them, too, the creatures frequently found in the places of the dead were supposed to be forms assumed by the dead *

It may be that these ancient peoples of the East had not enough knowledge of insect-metamorphoses to be struck by the illusive analogy on which modern theologians dwell; but there is one variety of these metamorphoses which, if they observed it, must have seemed to furnish a complete parallel. With moths of many kinds, it is the habit of the larva to bury itself in the earth, and after a time there is found near the chrysalis-case a winged creature. Why, then, should not the winged creature found along with the human body which has been buried in a cave, be concluded to have come out of it?

§ 169. Before dealing with supposed transformations of a third kind, like the above as identifying animals with deceased men, but unlike them as being otherwise suggested, two explanatory descriptions are needed: one of primitive language and the other of primitive naming.

The group of words used as signs of ideas by the savage,

* Whether this Egyptian symbol of the eternally existing, which only requires to have its central disc supplied with eyes and a beak to become a good representation of a flying owl, was originally such a representation, is a question to which I find no answer, but, manifestly, this symbol deviates less from the form of a flying owl than do the symbols of animals used in the hieroglyphics deviate from their originals. Another question is worth raising. Remembering that originally ghosts, not classed as good and bad, were indiscriminately spoken of as gods, demons, angels—remembering that the differentiation which eventually arose was naturally accompanied by specialized beliefs respecting these flying forms assumed by them, it seems not improbable that while from the owl with its feathered wings, came the conception of the good spirit or angel, there came from the bat with its membranous wings, the conception of the bad spirit or devil.

is very small. Hence of the many things and acts around, either but few can have signs, or those signs must be indiscriminately applicable to different things and acts · whence inevitable misunderstandings. If, as Burton says of the Dacotahs, "colours are expressed by a comparison with some object in sight," an intended assertion about a colour must often be taken for an assertion about the illustrative object. If, as Schweinfurth tells us of the Bongo dialect, one word means either "shadow" or "cloud," another "rain" or "the sky," another "night" or "to-day"; the interpretations of statements must be in part guessed at, and the guesses must often be wrong.

Indefiniteness, implied by this paucity of words, is further implied by the want of terms expressing degree. A Damara cannot understand the question whether of two stages the next is longer than the last. The question must be—"The last is little, the next, is it great?" and the only reply is—"It is so," or "It is not so." In some cases, as among the Abipones, the only mode of expressing superlatives is that of raising the voice. And then the uncertainties of meaning resulting from such indefinitenesses, are made greater by the rapid changes in primitive dialects. Superstitions lead to frequent substitutions of new words for those previously in use, and hence statements current in one generation, otherwise expressed in the next, are misconstrued.

Incoherence is an additional cause of confusion. Spix and Martius tell us that, in the aboriginal languages of South Brazil, "there are no such things as declensions and conjugations, and still less a regular construction of the sentences. They always speak in the infinitive, with, or mostly without, pronouns or substantives. The accent, which is chiefly on the second syllable, the slowness or quickness of pronunciation, certain signs with the hand, the mouth, or other gestures, are necessary to complete the sense of the sentence. If the Indian, for instance, means to say, 'I will go into the wood,' he says '*Wood-go*.' pushing out his mouth to indicate the

quarter which he intends to visit." Clearly, no propositions implying even moderate degrees of discrimination, can be communicated by such people. The relative homogeneity of early speech, thus implied by the absence of modifying terminations to words or the auxiliaries serving in place of them, is further implied by the absence of general and abstract words. Even the first grades of generality and abstractness are inexpressible. Dobrizhoffer says that both the Abipones and the Guaranis, "want the verb substantive to be. They want the verb to have. They have no words whereby to express man, body, God, place, time, never, ever, everywhere." Similarly, Lichtenstein describes the Kaffir language as having "no proper article, no auxiliary verbs, no inflections either of their verbs or substantives. The simple, abstract proposition, *I am*, cannot be expressed in their language."

With these *à posteriori* verifications of the *à priori* expectation, that early speech is meagre, incoherent, indefinite, we may anticipate countless erroneous beliefs caused by misapprehensions. We read in Dobrizhoffer that among the Guaranis, "*Abache* has three meanings—I am a *Guarani*, I am a *man*, or I am a *husband*; which of these is meant must be gathered from the tenor of the conversation." On asking what will happen with traditions narrated in such speech, we must answer that the resulting distortions will be extreme and multitudinous.

§ 170. Proper names were not always possessed by men: they are growths. It never occurred to the uninventive savage to distinguish this person from that by special sounds. An individual was at first signified by something connected with him, which, when mentioned, called him to mind—an incident, a juxta-position, a personal trait.

A descriptive name is commonly assumed to be the earliest. We suppose that just as objects and places in our own island acquired their names by the establishment of what was

originally an impromptu description ; so, names of savages, such as "Broad face," "Head without hair," "Curly head," "Horse-tail," are the significant *sobriquets* with which naming begins. But it is not so. Under pressure of the need for indicating a child while yet it has no peculiarities, it is referred to in connexion with some circumstance attending its birth. Angas tells us that the Lower Murray Australians derive their names either from some trivial occurrence, from the spot where they were born, or from a natural object seen by the mother soon after the birth of the child. This is typical. According to Andersson, Damara "children are named after great public incidents." Hodgson states that "most of the Bodo and Dhimáls bear meaningless designations, or any passing event of the moment may suggest a significant term." The name given to a Kaffir child soon after birth, says Shooter, "usually refers to some circumstance connected with that event, or happening about the same time"; and concerning the Mandingoes we learn the like from Park. By Schoolcraft we are told that among the Comanches, "the children are named from some circumstance in tender years"; and Hearne describes the names of the Chippewayan boys as "generally derived from some place, season, or animal." Even with so superior a type as the Bedouins, the like happens. "A name," says Burckhardt, "is given to the infant immediately on his birth. The name is derived from some trifling accident, or from some object which has struck the fancy of the mother or any of the women present at the child's birth. Thus, if the dog happened to be near on this occasion, the infant is probably named *Kelab* (from *Kelb*, a dog)."

This vague mode of identification, which arises first in the history of the race, and long survives as a birth-naming in the life of each individual, is by-and-by habitually followed by a re-naming of a more specific kind: a personal trait that becomes decided in the course of growth, a strange

accident, or a remarkable achievement, furnishing the second name. Among the peoples above mentioned, the Comanches, the Damaras, the Kaffirs, illustrate this. Speaking of the Kaffirs, Mann says—"Thus 'Umgodi' is simply 'the boy who was born in a hole' That is a birth name. 'Umginqisago' is 'the hunter who made the game roll over' That is a name of renown." Omitting multitudinous illustrations, let us note some which immediately concern us.

Speaking of the additional names gained, by the Tupis after successes in battle, Southey says—"They selected their appellations from visible objects, pride or ferocity influencing their choice": whence obviously results naming after savage animals. Writing of the Karens, Mason enumerates among animal-names—"Tiger," "Yellow-Tiger," "Fierce-Tiger," "Gaur," "Goat-antelope," "Horn-bill," "Heron," "Prince-bird," and, "Mango-fish". the preference for the formidable beast being obvious. In New Zealand a native swift of foot is called "Kawaw," a bird or fowl; and Burton gives as names of the Dacotah women, the "White Martin," the "Young Mink," the "Muskrat's Paw." All over the world this nicknaming after animals is habitual Lander speaks of it among the Yorubans; Thunberg, among the Hottentots; and that it prevails throughout North America every one knows.

As implied in cases above, self-exaltation is sometimes the cause, and sometimes exaltation by others. Livingstone tells us that when a Makololo chief arrives at a village, the people salute him with the title, "Great Lion." The writers of *Four Years in Ashantee*, describe King Koffi's attendants as exclaiming—"Look before thee, O Lion." In the Harris papyrus, King Men-cheper-ra (Tothmes III.) is called "the furious lion." In early Assyrian inscriptions we read—"Like a bull thou shalt rule over the chiefs"—a simile which, as we shall see in another case, readily passes into metaphor Thus in the third Sallier papyrus it is said of Rameses—"As a bull, terrible with pointed horns he rose"; and then in a subse-

quent passage the defeated address him—"Horus, conquering bull"

Remembering that this habit survives among ourselves, so that the cunning person is called a fox, the rude a bear, the hypocritical a crocodile, the dirty a pig, the keen a hawk, and so on—observing that in those ancient races who had proper names of a developed kind, animal-nicknaming still prevailed; let us ask what resulted from it in the earliest stages.

§ 171. On recalling the extreme vagueness of primitive speech, the answer will be manifest. Verbal signs being at first so inadequate that gesture-signs are needful to eke them out, the distinction between metaphor and fact cannot be expressed, much less preserved in tradition. If, as shown by instances Mr. Tylor gives, even the higher races mistake metaphors for facts—if the statement in the Koran that God opened and cleansed Mahomet's heart, becomes a belief that his heart was actually taken out, washed, and replaced—if from tribes without governors, described as without heads, there has arisen among civilized people the belief that there are headless races of men, we cannot be surprised if the savage, lacking knowledge and with rude language, gets the idea that an ancestor named "the Tiger" was an actual tiger. From childhood upwards he hears his father's father spoken of by this name. No one thinks of him as liable to misinterpret it. error being, indeed, a general notion the savage has scarcely reached. And there are no words serving to convey a correction, even if the need is perceived. Inevitably, then, he grows up believing that his father descended from a tiger—thinking of himself as one of the tiger stock. Everywhere the results of such mistakes meet us.

"A characteristic feature in Central Asiatic traditions," says Mitchell, "is the derivation of their origin from some animal." According to Brooke, the Sea Dyaks shrink

superstitiously from eating certain animals; because they suppose these animals bear a proximity to some of their forefathers, who were begotten by them or begot them. Of the Bechuana tribes Livingstone tells us "the term Bakatla means, 'they of the monkey'; Bakuena, 'they of the alligator'; Batlássí, 'they of the fish': each tribe having a superstitious dread of the animal after which it is called." Falkner describes the Patagonians as possessing "a multiplicity of these deities, each of whom they believe to preside over one particular caste or family of Indians, of which he is supposed to have been the creator. Some make themselves of the caste of the tiger, some of the lion, some of the guanaco, and others of the ostrich." Leaving the many illustrations supplied by other regions, we will look more nearly at those coming from North America. Ross says the tribes north of the Columbia "pretend to be derived from a musk-rat" In the words of Mr. Powers, "all the aboriginal inhabitants of California, without exception, believe that their first ancestors were created directly from the earth of their respective dwelling-places, and, in very many cases, that these ancestors were coyotes" [prairie-wolves]. And, here are extracts of like meaning from the elaborate work of Mr. Bancroft. Of the Zapotecs it is said that "some, to boast of their valour, made themselves out the sons of lions and divers wild beasts." By the Hardahs, "descent from the crows is quite gravely affirmed and steadfastly maintained." "Among the Ahts of Vancouver Island, perhaps the commonest notion of origin is that men at first existed as birds, animals, and fishes." The Chipewayans "derive their origin from a dog. At one time they were so strongly imbued with respect for their canine ancestry, that they entirely ceased to employ dogs in drawing their sledges." The Komagas "have their legendary Bird and Dog,—the latter taking the place occupied in the mythology of many other tribes by the wolf or coyote."

So well-organized are these beliefs that, in some cases, accounts are given of the transitions. Californian Indians descending from the prairie-wolf, explain the loss of their tails. they say, "an acquired habit of sitting upright, has utterly erased and destroyed that beautiful member." Certain Northern Californians who ascribe their origin in part to grizzly bears, assert that in old times these walked "on their hind legs like men, and talked, and carried clubs, using the fore-limbs as men use their arms." Even more strangely are these ideas of relationship shown by Franklin's account of the Dog-rib Indians —

"These people take their names, in the first instance, from their dogs. A young man is the father of a certain dog, but when he is married and has a son, he styles himself the father of the boy. The women have a habit of reproving the dogs very tenderly when they observe them fighting. 'Are you not ashamed,' say they, 'to quarrel with your little brother?' "

§ 172. This last illustration introduces us to the various sequences from the conception of animal-ancestry, thus arising by misinterpretation of nicknames.

Animals must think and understand as men do; for are they not derived from the same progenitors as the tribe, or as other tribes? Hence the belief of the Papagos, that in primeval days "men and beasts talked together. a common language made all brethren." Hence the practice of the Kamtschadales, who, according to Grieve, when fishing, "entreat the whales or sea-horses not to overthrow their boats; and in hunting, beseech the bears and wolves not to hurt them." Hence the habit of the Dacotahs, who ask snakes to be friendly, and of whom Schoolcraft says—"I have heard Indians talk and reason with a horse, the same as with a person." Hence the notion betrayed by the negro attendants of Livingstone, who tells us—"I asked my men what the hyænas were laughing at; as they usually give animals credit for a share of intelligence. They said they were laughing because we could not take the whole (of

the elephant), and that they would have plenty to eat as well as we "

A second sequence is that animals, thus conceived as akin to men, are often treated with consideration. Schoolcraft states that the Chippewas, thinking they will have to encounter in the other world the spirits of the animals killed, apologized to a bear for killing him, asked forgiveness, and pretended that an American was to blame ; and, similarly, we are told by Harris that the Ostyaks, after killing a bear, "ask his pardon," and tell the dead bear that the Russians killed him. In like manner of the Kookies, we learn from M'Culloch that "the capture of an elephant, tiger, bear, wild hog, or any savage wild beast, is followed by a feast in propitiation of its manes " Kindred practices are followed by the Stiens of Cambodia, the Sumatrans, the Dyaks, the Kaffirs, the Siamese, and even the Arabs

Naturally, as a further sequence, there comes a special regard for the animal which gives the tribal name, and is considered a relative. As the ancestor conceived under the human form is thought able to work good or ill to his descendants, so, too, is the ancestor conceived under the brute-form. Hence, as Bancroft tells us, "no Indian tracing his descent from the spirit mother and the grizzly, as here described, will kill a grizzly bear " In like manner the Osages will not destroy the beaver : believing themselves derived from it. "A tribe never eats of the animal which is its namesake," says Livingstone of the Bechuanas. Like ideas and practices occur in Australia in a less settled form. "A member of the family will never kill an animal of the species to which his kobong [animal-namesake] belongs, should he find it asleep ; indeed, he always kills it reluctantly, and never without affording it a chance of escape." Joined with this regard for the animal-namesake considered as a relative, there goes belief in its guardianship ; and hence arises the faith, so widely diffused, in omens derived from birds and quadrupeds. The ancestor under the brute

form is supposed to be solicitous for the welfare of his kindred; and so tells them by signs and sounds of their danger.

§ 173. Do we not in these observances see the beginnings of a worship? If the East Africans, as Livingstone tells us, think the souls of departed chiefs enter into lions and render them sacred; we may conclude that sacredness will equally attach to the animals whose human souls were ancestral. If the Congo people, holding this belief about lions, think "the lion spares those whom he meets, when he is courteously saluted"; the implication is that there will be propitiations of the beast-chief who was the progenitor of the tribe. Prayers and offerings may be expected to develop into a cult, and the animal-namesake to become a deity.

When, therefore, among the North American Indians, whose habit of naming from animals still continues, and whose legends of animal-progenitors are so specific, we find animals taking rank as creators and divinities—when we read in Bancroft that "'raven' and 'wolf' are the names of the two gods of the Klinkits, who are supposed to be the founders of the Indian race"; we have just the result to be anticipated. And when of this tribe we further read that "the Raven trunk is again divided into sub-clans, called the Frog, the Goose, the Sea-Lion, the Owl, and the Salmon," while "the Wolf family comprises the Bear, Eagle, Dolphin, Shark, and Alca"; we see that deification of the ancestor under the animal form follows the same course as deification of the ancestor under the human form. In either case, more recent progenitors of sub-tribes acquire a sacredness second to that of the ancient progenitors of the entire tribe.

Guided by these various clues, we cannot, I think, hesitate to infer that much of the developed animal-worship of the ancient historic races, grew out of this misinterpretation of nicknames. Even now, among partially-civilized peoples,

the re-genesis of such worship is shown us. In the appendix to *Four Years in Ashantee*, we read that certain of the king's attendants, whose duty it is to praise him, or "give him names," cry out among other titles—"Bore," (the name of a venomous serpent) "you are most beautiful, but your bite is deadly." As these African kings ordinarily undergo apotheosis—as this laudatory title "Bore," may be expected to survive along with the other titles, and to be used in propitiations—as the Zulus, who, led by another suggestion, think dead men become snakes, distinguish certain venomous snakes as chiefs; we must admit that from this complimentary nickname of a king who became a god, may readily grow up the worship of a serpent—a serpent who, nevertheless, had a human history. Similarly when we ask what is likely to happen from the animal-name by which the king is honoured in Madagascar. As Ellis tells us in his history—"“God is gone to the west—Radama is a mighty bull,” were expressions used by the Malagasy women in their songs in praise of their king, who was absent on a warlike expedition.” Here we have the three titles simultaneously applied—the god, the king, the bull. If, then, we read that by the Egyptians, even in their later times, the king was deified—if the same papyrus which shows us Rameses II. invoking his father as a god, also contains the title “conquering bull,” given to Rameses by the subjugated, can we doubt that from like occurrences in earlier times arose the worship of Apis? Can we doubt that the bovine deities of the Hindus, the Assyrians, and other ancient peoples, similarly originated?

So that misinterpretation of metaphorical titles which inevitably occurs in early speech, being given, the rise of animal-worship is a natural sequence. Mammals, birds, reptiles, fishes, all yield nicknames, are all in one place or other regarded as progenitors; all acquire, among this or that people, a sacredness rising in many cases to adoration. Even where the nickname was one of reproach—even where

the creature is of a kind to inspire contempt rather than respect, we see that identification with the ancestor explains worship of it. The Veddahs, who are predominantly ancestor-worshippers, also worship a tortoise. Though among them the reason is not traceable, we find an indication of it elsewhere. Mr. Bates, during his Amazon explorations, had two attendants surnamed Tortoise; and their surname had descended to them from a father whose slowness had suggested this permanent nickname. Here we see the first step towards the formation of a tortoise tribe; having the tortoise for ancestor, totem, deity.

§ 174. Some strange facts, completely explicable on the hypothesis above set forth, may be added. I refer to the worship of beings represented as half man half brute.

If, in the genealogy of future Ashantee kings, tradition preserves the statement that their ancestor was the venomous serpent "Bore"—if there goes down to posterity the fact that "Bore" was a ruler, a law-maker, an articulate speaking person—if legend says both that he was a snake and that he was a man; what is likely to happen? Believing implicitly all he is told by his seniors, the savage will accept both these assertions. In some cases he will sit down contentedly under the contradiction; in others he will attempt a compromise. Especially if he makes a graphic or sculptured effigy, will he be led to unite the incongruous characters as best he can—will produce a figure partly human and partly reptilian. It cannot be reasonably doubted that if Malagasy stories and songs tell of the conquering Radama as "a mighty bull," as a king, as a god, development of the resulting cult, joined with development of the plastic arts, may end in a representation of the god Radama either as a man or as a bull, or as a bull-headed man, or as a creature having a bovine body with a human head.

In another way is this type of deity suggested by misin-

terpretation of metaphorical titles. Ancestors who survive in legends under their animal-names, and of whom the legends also say that they took to wife ancestors bearing either different animal-names or human names, will be supposed to have had offspring combining the attributes of both parents. A passage from Bancroft's account of the Aleutians shows us the initial stage of such a belief.

"Some say that in the beginning a Bitch inhabited Unalaska, and that a great Dog swam across to her from Kadiak, from which pair the human race have sprung. Others, naming the bitch-mother of their race Mahakh, describe a certain Old Man, called Iraghdadakh, who came from the north to visit this Mahakh. The result of this visit was the birth of two creatures, male and female, with such an extraordinary mixing up of the elements of nature in them that they were each half man half fox."

Now such a legend, or such a kindred one as that of the Quichés concerning the descent of mankind from a cave-dwelling woman and a dog that could transform himself into a handsome youth, or such a one as that of the Dikokamenni Kirghiz, who say they are descended "from a red greyhound and a certain queen with her forty hand-maidens," can hardly fail to initiate ideas of compound gods. Peoples who advance far enough to develop their rude effigies of ancestors placed on graves, into idols inclosed in temples, will, if they have traditions of this kind, be likely to represent the creators of their tribes as dog-headed men or human-faced dogs.

An intelligible origin for the hybrid deities which so many semi-civilized people have had, is thus furnished. The Chaldeans and Babylonians had in common their god Nergal, the winged man-lion, and also Nin, the fish-god—a fish out of which grew near its head a human head, and near its tail human feet. the adjacent Philistines, too, having their kindred god Dagon, with the face and hands of a man and the tail of a fish. Then in Assyria there was the winged man-bull, representative of Nin; and in Phœnicia there was Astarte, sometimes represented as partially

human and partially bovine Egypt had a great variety of these compound supernatural beings. In addition to the god Ammon, figured as a man with a ram's head, Horus, with the head of a hawk, the goddesses Muth with that of a lion, and Hathor with that of a cow, Toth with that of an ibis, Typhon with that of an ass, and brute-headed demons too numerous to mention, we have the various sphinxes, which to a lion's body unite the heads of men, of rams, of hawks, of asps, etc. We have also more involved compounds; as winged mammals with hawks' heads, and winged crocodiles with hawks' heads. Nay, there was even one named Sak, which, says Wilkinson, "united a bird, a quadruped, and a vegetable production in its own person."

Such grotesque conceptions, of which otherwise there seems no feasible explanation, are explicable as due to the misinterpretation of several metaphorical names borne by the same person. We have seen that to the present king of Ashantee both "Lion" and "Snake" are given as names of honour; and as we shall presently see, the multiplication of such names of honour was carried to a great extent by the Egyptians.

§ 175. To abridge as far as may be what remains of this long exposition, I will merely indicate the additional groups of supporting facts.

The Egyptians, whose customs were so persistent and whose ancestor-worship was so elaborate, show us, just where we might expect them, all the results of this misinterpretation. They had clans whose sacred animals differed, and who treated each other's sacred animals with abhorrence and enmity: a fact pointing to an early stage when these animals gave the names to chiefs of antagonistic tribes. Animal-naming, thus indicated as primitively practised, continued down to late periods in their history: after their kings had human proper names, they had still animal-names joined with these. They had sacred animals; and some of

the names of these were identical with those given in honour. They embalmed animals as they embalmed men. They had animal-gods; they had deities half brute half human; they had figures of other compound beings.

Where we find most dominant the practice of naming after animals, and where there result these legends of descent from animals and regard for them as divinities, we also find developed to the greatest extent, the legends about animal-agency in human affairs. As Bancroft says concerning the Indians of the Pacific States—"Beasts and birds and fishes fetch and carry, talk and act, in a way that leaves even *Æsop's* heroes in the shade." All the multitudinous fables of this class, found among many peoples, fall naturally into their places on the hypothesis here set forth.

This hypothesis explains, also, the cases in which the order of genesis is inverted. Bancroft tells us that "the Salish, the Nisquallies, and the Yakimas * * * all hold that beasts, fishes, and even edible roots are descended from human originals." Clearly this is a conception which the misinterpretation of nicknames may originate. If "the Bear" was the founder of a tribe whose deeds were preserved in tradition, the alternative interpretations might be either that he was the bear from whom men descended, or that he was the man from whom the bears descended. Many of the metamorphoses of classic mythology have probably arisen in a kindred way, when the human antecedents, either of parentage or adventures, were so distinct as to negative the opposite view.

Of course the doctrine of metempsychosis, thus initiated, becomes comprehensible; and its developments no longer look so grotesque. Where a man who had several animal-names was spoken of in this legend as the eagle and in that as the wolf, there would result the idea that he was now one and now the other; and from this suggestion, unchecked credulity might not unnaturally elaborate the belief in successive transformations.

Stories of women who have borne animals, similarly fall into their places. St John says that "the Land Dyaks consider it wrong to kill the cobra de capella; because one of their female ancestors was pregnant for seven years, and ultimately brought forth twins—one a human being, the other a cobra." In like manner we are told by Cook that the Batavians "believe that women, when delivered of a child, are frequently delivered at the same time of a young crocodile as a twin, and that this is taken to the river by the midwife." May we not conclude that twins of whom one gained the nickname of the crocodile, gave rise to a legend which originated this monstrous belief?

If the naming after animals was a mode of distinguishing individuals which preceded the use of human proper names—if, when there arose such proper names, these did not at first displace the animal-names, but were joined with them—if, at a still later stage, animal-names fell into disuse and the conventional surnames became predominant; then it seems inferable that the brute-god arises first, that the god half-brute and half-human belongs to a later stage, and that the anthropomorphic god comes latest. Amid the entanglements due to the survivals of old worships in the midst of newer ones, and due to the mixtures of mythologies, it is difficult to show this; but there seems reason for suspecting that it has been so among peoples who originally practised animal-naming extensively.

§ 176. Sundry minor groups of facts thus join the major groups in upholding the belief that animal-worship is a disguised form of ancestor-worship. There are three ways in which the primitive man is led to identify the animal with the ancestor.

The other-self of the dead relative is supposed to come back, habitually or occasionally, to his old abode. how else is it possible for the survivors, sleeping there, to see him in their dreams? Here are creatures which commonly, unlike

wild creatures in general, come into houses—come in, too, secretly in the night. The implication is clear. That snakes, which especially do this, are the returned dead, is inferred by peoples in Africa, Asia, and America the haunting of houses being the common trait of the kinds of snakes revered or worshipped; and also the trait of certain insects and birds similarly regarded.

The ghost, sometimes re-visiting the house, is thought also to linger in the neighbourhood of the corpse. Creatures commonly found in caves which have been used for burials, hence come to be taken for the new shapes assumed by departed souls. Bats and owls are conceived to be winged spirits, and from them arise the traditional ideas of devils and angels.

Lastly, and chiefly, comes that identification of the animal with the ancestor, which is caused by interpreting metaphorical names literally. That primitive speech is unable to transmit to posterity the difference between an animal and a person named after that animal, has been shown. Hence the confusion of the two, hence the regard for the animal as progenitor, hence the growth of a worship. Besides explaining animal-gods, this hypothesis accounts for sundry anomalous beliefs—the divinities half-brute, half-human; the animals that talk, and play active parts in human affairs; the doctrine of metempsychosis, etc.

By modification upon modification, leading to complications and divergences without limit, evolution brings into being products extremely unlike their germs; and we here have an instance in this derivation of animal-worship from the propitiation of ghosts.

CHAPTER XXIII.

PLANT-WORSHIP.

§ 177. WHETHER produced by fasting, fever, hysteria, or insanity, any extreme excitement is, by savage and semi-civilized peoples, ascribed to a possessing spirit this we saw in §§ 123—31. Similar is the interpretation of an unusual mental state caused by a nervous stimulant. It is thought that a supernatural being, contained in the solid or liquid swallowed, produces it.

Speaking of opium-eaters, Vámbéry says—"What surprised me most was that these wretched people were regarded as eminently religious, of whom it was thought that from their love to God and the Prophet they had become mad, and stupefied themselves in order that in their excited state they might be nearer the Beings they loved so well." Bastian tells us that the Mandingoes intoxicate themselves to enter into relation with the godhead: the accompanying belief evidently being that the exaltation experienced is a divine inspiration. This was the view definitely expressed by the Arafura (Papuan Islander) who, when told about the Christian God, said—"Then this God is certainly in your arrack, for I never feel happier than when I have drunk plenty of it."

May we not hence expect certain derivative beliefs re-

specting plants which yield intoxicating liquors? Obviously; and our search for them will not be fruitless.

§ 178. As a typical case may be taken the worship of the Soma. This plant, represented as growing in certain mountains, as gathered by moonlight, and as drawn with ceremonies to the place of sacrifice, was crushed between stones, and its juice expressed and filtered. When fermented, the juice (in some places described as sweet) produced an intoxicating liquor, which was drunk by the devotees; who, judging from the expressions, "a rishi, a drinker of the Soma," were of the priestly class. After the manner indicated above, the exhilarating effects of the beverage were attributed to inspiration by a supernatural being, who was therefore lauded and adored. In his essay on the subject, partly translated by Dr. Murr, Windischmann describes the Soma as "the holiest offering of the ancient Indian worship"; or, in the words of Murr, "the rishis had come to regard Soma as a god, and apparently to be passionately devoted to his worship." Here, from the *Sanskrit Texts* of the latter writer, are passages showing the genesis of the belief. First may be placed some implying the exaltation caused by the fermented Soma-juice.

Rig Veda vi 47, 3 "This [soma] when drunk, stimulates my speech [or hymn], thus called forth the ardent thought"

R V ix 25, 5 "The ruddy Soma, generating hymns, with the powers of a poet"

R V viii 48, 3 "We have drunk the soma, we have become immortal, we have entered into light, we have known the gods," etc Not only the rishis are inspired by soma, but also their deities. "The gods drink the offered beverage," and are "thrown into a joyous intoxication." Indra "performs his great deeds under its influence." It is said—"We summon his soul [of Varuna] with Soma." Elsewhere the contained supernatural being is addressed personally.

R V lx 110, 7 "The former [priests] having strewed the sacred grass, offered up a hymn to thee, O Soma, for great strength and food"

R V ix 96, 11 "For through thee, O pure Soma, our wise forefathers of old performed their sacred rites"

R V 96, 18 "Soma, *īśhi*-minded, *īśhi*-maker, bestower of good, master of a thousand songs, the leader of sages"

How literal was the belief that by a draught of soma the drinker became possessed, is proved by the prayer—"Soma * * * do thou enter into us, full of kindness" And then, showing how the resulting mental power was regarded as a divine afflatus, revealing transcendent knowledge, we have the passage in R. V. ix. 97, 7—"Uttering, like *Uśanas*, the wisdom of a sage, the god (Soma) declares the births of the gods." Other passages, along with this deification of the Soma, join the belief that he is present in the beverage partaken of alike by the other gods and by men. Instance, in R. V. ix 42, 2 the words—"This god, poured forth to the gods, with an ancient hymn, purifies with his stream." Further, there are implied identifications of this supernatural being with a once-living person. One of the less specific in R. V. 107, 7 runs—"A *īśhi*, a sage, intelligent, thou (Soma) wast a poet, most agreeable to the gods." In other places his identity is more specifically stated. Thus, in the *Taittirīya Brāhmaṇa*, ii., 3, 10, 1, it is said—"Prajāpati created king Soma. After him the three Vedas were created." And still more specific are the legends which describe king Soma as having wives, and narrate his disagreements with some of them. Much more exalted, however, is the character elsewhere given to him. "He is immortal, and confers immortality on gods and men"; "the creator and father of the gods"; "king of gods and men." Yet along with this ascription of supreme divinity goes the belief that he is present in the Soma-juice. Here is a passage combining all the attributes —

R V ix 96, 5 and 6 "Soma is purified; he who is the generator of hymns, of *Dayus*, of *Prithvi*, of *Agni*, of *Sūrya*, of *Indra*, and of *Vishnu* Soma, who is a *bīhman*-priest among the gods (or priests), a leader among the poets, a *īśhi* among sages, a buffalo among wild beasts, a

falcon among vultures, an axe amid the forests, advances to the filter with a sound "

The origin of these conceptions dates back to a time when the Aryan races had not widely diverged; for like conceptions occur in the Zendavesta. Though instead of Soma, the name there used is Haoma, there is so general an agreement as to show identity of the plant and of the worship. Windischmann says the Haoma is "not a plant only, but also a powerful deity", and also that "in both works (Zendavesta and Rig Veda) the conceptions of the god and the sacred juice blend wonderfully with each other."

That certain plants yielding intoxicating agents come therefore to be regarded as containing supernatural beings, is a conclusion supported by other instances—that of the vine being one. Dr Muir, speaking of Soma as "the Indian Dionysus," quotes from the *Bacchæ* of Euripides certain passages showing analogous conceptions. Of Dionysus it is said —

"He discovered and introduced among men the liquid draught of the grape, which puts an end to the sorrows of wretched mortals" * * *

"He, born a god, is poured out in libations to the gods" * * *

"And this deity is a prophet. For Bacchic excitement and raving have in them much prophetic power. For when this god enters in force into the body, he causes those who rave to foretell the future."

That the facts are to be thus interpreted is shown by certain allied but less developed beliefs found elsewhere. Garcilasso tells us that in Peru, tobacco "has been called the sacred herb"—a nervous stimulant was regarded with reverence. Similarly with another plant said to have an invigorating effect, the *coca*. According to Markham, "the Peruvians still look upon [coca] with feelings of superstitious veneration. In the time of the Yncas it was sacrificed to the Sun, the Huillac Umu, or high priest, chewing the leaf during the ceremony." Among the Chibchas, too, *hayo* (coca) was used as an inspiring agent by the priests; and certain people chewed and smoked tobacco to produce the power of divination. In North Mexico, a kindred

notion is implied by a fact Bancroft gives—some of the natives “have a great veneration for the hidden virtues of poisonous plants, and believe that if they crush or destroy one, some harm will happen to them.” And at the present time in the Philippine Islands, as we are told by the recent traveller Jagor, the Ignatius bean, which contains strychnia and is used as a medicine, is worn as an amulet and held capable of miracles.*

§ 179. The attribution to a plant of a human personality, and the consequent tendency towards worship of the plant, has other origins. Here is one of them.

In § 148, after giving some extracts from the cosmogony of the Amazulu, including the statement that Unkulunkulu, their creator, descended from a reed, or a bed of reeds, I

* As a corollary from this group of beliefs, let me here add a possible explanation. Causing mental exaltation, Soma is described in the Vedic hymns as giving knowledge. We have the expressions—“Soma of incomparable wisdom”, “the ruddy Soma” has “the understanding of a sage,” “we have drunk the Soma, * * * we have entered into light” By implication, then, the Soma is called, if not a “tree of knowledge,” still, a plant of knowledge. Further, the Soma is said to have given life to the gods, and the rejoicing statement of the rishis is—“We have drunk the Soma, we have become immortal” As the source of an enlivening beverage the Soma is thus a “tree of life”, and how naturally such a notion results from the effect of a nervous stimulant, is shown to us by the calling alcohol *eau de vie*. Now with these facts join the further fact, that where the supply of a valued commodity is small, a superior naturally forbids the use of it to inferiors—to the conquered, to slaves, to subjects. Thus in Peru, the nervous stimulant *coca*, or *cuca*, was limited to the royal class. “only the Ynca and his relations, and some Curacas, to whom the Ynca extended this favour, were allowed to eat the herb called *cuca*” We thus discern a not improbable motive for interdicting the use of a plant from the fruit or juice of which a stimulant producing mental exaltation is obtained—a motive much more comprehensible than is the desire that subject beings should continue to confound good and evil. A certain ancient legend is thus rendered comprehensible. (Since this was written I find that the sacred tree of the Babylonians, figured in their sculptures, is considered by archæologists—having no hypothesis to justify—to represent the palm-tree, and with this identification we may join the fact that even still, in some regions, an intoxicating drink is made from fermented palm-juice)

cited the suggested interpretation of Canon Callaway ; remarking that we should hereafter find a more natural one. This more natural one is not derivable from data furnished by the Amazulu themselves , but comparison of their traditions with those of neighbouring races discloses it.

Already it has been shown that in South Africa, as in other parts of the world, traditions obviously derived from ancestral troglodytes, refer to caves as places of creation. Instances before given may be supported by others. Respecting the Bechuanas, Moffatt says—

“Morimo [the native name for a god] as well as man, with all the different species of animals, came out of a hole or cave in the Bakone country, to the north, where, say they, their footmarks are still to be seen in the indurated rock, which was at that time sand ”

Again, the beliefs of the Basutos are thus given by Casalis —

“A legend says that both men and animals came out of the bowels of the earth by an immense hole, the opening of which was in a cavern, and that the animals appeared first. Another tradition, more generally received among the Basutos, is, that man sprang up in a marshy place, where reeds were growing ”

And now observe the unexpected way in which these two traditions of the Basutos are reconciled with one another, as well as with the traditions of the Bechuanas and the Amazulu. Here is a passage from Arbousset and Daumas:—

“This spot is very celebrated amongst the Basutos and the Lighoyas, not only because the *lukatus* of the tribes are there, but because of a certain mythos, in which they are told that their ancestors came originally from that place. There is there a cavern surrounded with marsh reeds and mud, whence they believe that they have all proceeded ”

So that these several statements refer to the same place—the place where Unkulunkulu “broke off in the beginning”—where he “broke off the nations from Uthlanga”—where the tribes separated (the word used means literally to separate). And while in some traditions the cave remained the dominant recollection, in others the surrounding bed of reeds acquired predominance ; and in their imperfect speech this was confounded with a reed. Men came out of the reeds ; men descended from reeds ; became one form of the legend.

Among the Amazulu there seems no resulting worship of the reed ; and as, worshipping their near ancestors, they do not worship their remotest ancestor Unkulunkulu, it is consistent that they should not worship the plant whence he is said to have proceeded. Another South African race, however, worship a plant similarly regarded as an original ancestor. Of the Damaras, Galton tells us "a tree is supposed to be the universal progenitor, two of which divide the honour" (Andersson says there are several). Elsewhere he adds—"We passed a magnificent tree. It was the parent of all the Damaras. * * * The savages danced round and round it in great delight." In another place he thus gives the Damara creed—"In the beginning of things there was a tree, and out of this tree came Damaras, Bushmen, oxen, and zebras. * * * The tree gave birth to everything else that lives." Unconnected with anything further, this appears to be an unaccountable belief. But a clue to the origin of it is yielded by the following note in Andersson's *Ngami*. "In my journey to the Lake Ngami, * * * I observed whole forests of a species of tree called Omumbo-rombonga, the supposed progenitor of the Damaras." If now we make the reasonable supposition that these tribes descended from a people who lived in forests of such trees (and low types, as Veddahs, Juáangs, and wild tribes in the interior of Borneo, are forest-dwellers), we see that a confusion like that between a reed and a bed of reeds, originates this notion of descent from a tree.

The inference drawn from these two allied cases might be questionable were it unsupported ; but it is supported by the inference from a much stronger case. We learn from Bastian that "the Congese proper, according to their traditions, have sprung from trees" ; and we also learn that "the forest from which a former reigning family of Congo was said to have come to subdue the country, was afterwards an object of veneration to the natives" Here, then, emergence from a forest is obviously confounded with

descent from trees; and there is a consequent quasi-worship both of the forest and of a certain kind of tree which is planted in their market-places

On recalling the fact pointed out on p. 313, that even Sanscrit indiscriminately applies to the same process the words making and begetting; we shall not doubt that an inferior language will fail to maintain in tradition the distinction between coming out of a forest of trees and coming out of trees; and that emerging from trees of a certain kind will be confounded with emergence from a certain kind of tree. Doubt, if any remains, will disappear when we come to sundry analogous cases of confusion between a locality whence the race came, and a conspicuous object in that locality, which so becomes the supposed parent of the race.

§ 180 Before passing to the third origin of plant-worship, which, like the third origin of animal-worship, is linguistic, I must again comment on the defects of language conducing to it—defects some of them before pointed out, and some of them still to be pointed out.

How the poverty, the vagueness, and the incoherence of early speech, must inevitably cause misconstruction of traditions, I may remind the reader by some additional cases. According to Palgrave, "the colours green, black, and brown are habitually confounded in common Arabic parlance." Hunter says, "Santali, being barren of abstract terms, has no word for 'time.'" We are told by Hill that the Kamtschkadales have "but one term for the sun and the moon," and have "scarcely any names for fish or birds, which are merely distinguished by the moon in which they are the most plentiful." Such instances strengthen the conclusion that undeveloped speech cannot express the distinction between an object and a person named after it.

But here let us observe that this inference need not be left in the form of an implication. it may be made direct.

In early stages of linguistic progress there can exist no such abstract word as name; still less a word for the process of naming even the ancient Egyptian language not having risen to the power of expressing any difference between "My name" and "I name or call" To conceive a name as such, is to conceive it as a symbol of symbols There must first be observed the fact that special articulate sounds applied to particular things severally stand related to them in like ways. Before a word can be thought of as a name, it must be thought of not simply as a group of sounds associated with a certain object, but it must be thought of as having a trait in common with many groups. The ability of names to remind other persons of the objects named, must be recognized as a general property of names; and then this property must be abstracted in thought from its concrete manifestations before the conception of a name can arise. If now we remember that in the languages of inferior races the advances in generalization and abstraction are so slight that while there are words for particular kinds of trees there is no word for tree; and that, as among the Damaras, while each reach of a river has its special title, there is none for the river as a whole, much less a word for river; or if, still better, we consider the fact that the Cherokees have thirteen different verbs for washing different parts of the body, and different things, but no word for washing, dissociated from the part or thing washed; we shall see that social life must have passed through sundry stages, with their accompanying steps in linguistic progress, before the conception of a name became possible.

Inductive justification is not wanting. Unfortunately, in most vocabularies of the uncivilized, travellers have given us only such equivalents of our words as are used by the peoples described: taking no note of the words we possess for which they have no equivalents. There is not this defect, however, in the *Vocabulary of Dialects spoken in the Nicobar and Andaman Isles*, compiled by Mr. F. A. de

Roepstorff.* From this it appears that the tribes in Great Nicobar, in Little Nicobar, in Teressa, and in the Andaman Islands, have no words corresponding to our word name.

The inference, then, is inevitable. If there is no word for name, it is impossible for the narrators of legends to express the distinction between a person and the object he was named after. The results of the confusion we have now to observe in its relations to plant-worship.

§ 181. Writing of the Tasmanians, Dr. Milligan says—"The names of men and women were taken from natural objects and occurrences around, as, for instance, a kangaroo, a gum-tree, snow, hail, thunder, the wind, flowers in blossom, etc." Among the Hill-tribes of India the like occurs: "Cotton" and "White Cotton" are names of persons among the Karens. Similarly in America The Arawâks have individuals known as "Tobacco," "Tobacco-leaf," "Tobacco-flower;" and by the ancient Peruvians one of the Yncas was called "Sayri," a tobacco-plant.

On joining with these facts the fact that by the Pueblos, one of the several tribes into which they are divided is called the "Tobacco-plant race," we cannot fail to recognize an effect of this naming after plants. Associated as this clan of Pueblos is with other clans named after the bear, the prairie-wolf, the rattle-snake, the hare, which have severally descended from men called after, and eventually identified with, these animals, the "Tobacco-plant race" has doubtless descended from one who was called after, and eventually identified with, the tobacco-plant. In like manner the "Reed-grass race," of these same people, must be regarded as having had a kindred derivation; as also, among the Brazilian Indians, the "Mandiocca" race.

Now if an animal regarded as original progenitor, is therefore reverentially treated, so, too, may we expect the plant-ancestor will be: not, perhaps, so conspicuously, since

* Calcutta, 1875

the powers of plants to affect the fates of human beings are less conspicuous. But the idea of the sacredness of certain plants is likely thus to originate, and to generate quasi-religious observances

Here may fitly be noted a way in which misinterpretation of names leads to a belief, not in the descent of men from animals and plants, but in the descent of animals and plants from men. Already we have seen (§ 175) that by the Salish, the Nisquallies, the Yakimas, not only birds and beasts, but also edible roots are supposed to have had human ancestors, and it was suggested that misconstruction of names might lead to this supposition as well as to its converse. But there exists a habit more specially conducing to beliefs of this class. Various unalied peoples make it a custom for the parent to take a name from the child, and to be known after its birth as father or mother of So-and-so: an instance was given in § 171, and the Malays and Dyaks furnish others. Now, if the child has either an animal-name or a plant-name, the literal rendering in tradition of the statement that a certain man was "the father of the turtle," or a certain woman "the mother of maize," would lead to the belief that this animal or this plant had a human progenitor. In some cases a figurative use of these names of parenthood, leads in a still stranger way to the same error, and to many kindred errors. An individual is regarded as the producer, or generator, of some attribute by which he or she is distinguished; and is hence called the parent of that attribute, which may be signified either directly or by metaphor. For example, Mason tells us of the Karens—

"When the child grows up, and develops any particular trait of character, the friends give it another name, with 'father' or 'mother' attached to it. Thus, a boy is very quick to work, and he is named 'Father of swiftness'. If he is a good shot with a bow and arrow, he is called 'Father of shooting'. When a girl is clever to contrive, she is named 'Mother of contrivance'. If she be ready to talk, she becomes 'Mother of talk'. Sometimes the name is given from the personal

appearance. Thus a very white girl is called 'Mother of white cotton', and another of an elegant form is named "Mother of the pheasant" "

Here we have forms of names which, misunderstood in after-times, may initiate beliefs in the human ancestry not only of plants and animals, but of other things.

§ 182. An indirect proof that the attribution of spirits to plants, and the resulting plant-worship, have arisen in one or other of the ways shown, must be added. The evidence clearly implies that there is always an identification, near or remote, between the worshipped plant and a human being.

Did plant-worship arise from an alleged primeval fetichism—were it one of the animistic interpretations said to result from the tendency of undeveloped minds to ascribe duality to all objects; there would be no explanation of the conceived shape of the plant-spirit. The savage thinks of the other-self of a man, woman, or child, as like the man, woman, or child, in figure—as being, indeed, a duplicate recognizable as the particular individual. If, then, the conception of plant-spirits were, as alleged, a sequence of the original animism, preceding and not succeeding the ghost-theory, plant-spirits ought to be conceived as plant-shaped; and they ought to be conceived as having other attributes in common with plants. Nothing of the kind is found. They are not supposed to have any plant-characters; and they are supposed to have many characters wholly unlike those of plants. This is both directly and indirectly shown.

In the East there are stories of speaking trees. to the indwelling doubles is attributed a faculty which the trees themselves have not. The Congo-people place calabashes of palm-wine at the feet of their sacred trees, lest they should be thirsty: they ascribe to them a liking not shown by trees, but treat them as they do their dead. In like manner the statement of Oldfield, who, at Adda-coodah, saw fowls and many other things suspended as

offerings to a gigantic tree; the statement of Mr. Tylor, who, to an ancient cypress in Mexico, found attached by the Indians, teeth and locks of hair in great numbers; the statement of Hunter in his *Annals of Rural Bengal*, that once a year, at Beerbhoom, the people "make offerings to a ghost who dwells in a Bela-tree;" unite to show that not the tree, but the resident being, is propitiated; and that this has characters utterly unlike those of a tree, and completely like those ascribed to the other-self of a human being.

Still more conclusive is the direct evidence. In Low's *Sarawak*, we read that the people believe men are sometimes metamorphosed into trees; and he further says—

"The Land Dyaks venerate certain plants, building small bamboo altars near them, to which is placed a ladder to facilitate the ascent of the spirits to the offerings, consisting of food, water, etc., placed on the altar on festive occasions"

Equally specific is the conception of the Iroquois, as given by Morgan. He says that the spirit of corn, the spirit of beans, the spirit of squashes, "are supposed to have the forms of beautiful females" And this last instance reminds us of the dryades of classic mythology, which, similarly conceived as human-shaped female spirits, were sacrificed to in the same ways that human spirits in general were sacrificed to.

Harmonizing entirely with the foregoing interpretations, these facts are incongruous with the animistic interpretation.

§ 183 Plant-worship, then, like the worship of idols and animals, is an aberrant type of ancestor-worship—a type somewhat more disguised externally, but having the same internal nature. Though it grows out in three different directions, there is but one root.

The toxic effects produced by certain plants, or by extracts from them, or by their fermented juices, are assimilated to other nervous excitements, as caused by spirits or

demons. Where the stimulation is agreeable, the possessing spirit, taken in with the drug and supposed to be previously in the plant, is regarded as a beneficent being—a being sometimes identified with a human original and gradually developed into a divinity who is lauded and prayed to.

Tribes that have migrated or emerged from places characterized by particular trees or plants, unawares change the legend of emergence from them into the legend of descent from them. words fitted to convey the distinction not being contained in their vocabularies. Hence the belief that such trees are their ancestors, and the regard for them as sacred.

Further, the naming of individuals after plants becomes a cause of confusion. Identification of the two in tradition can be prevented only by the use of verbal qualifications that are impossible in rude languages; and from this identification there arise ideas and sentiments respecting the plant-ancestor, allied to those excited by the animal-ancestor or the ancestor figured as human.

Thus the ghost-theory, supplying us with a key to other groups of superstitions, supplies us with a key to the superstitions constituting this group—superstitions otherwise implying gratuitous absurdities which we may not legitimately ascribe even to primitive men.

CHAPTER XXIV.

NATURE-WORSHIP.

§ 184. UNDER this title which, literally interpreted, includes the subject-matters of the last two chapters, but which is conventionally used in a more restricted sense, it remains to deal with those superstitious beliefs and sentiments that refer to the more conspicuous inorganic objects and powers.

If not prepossessed by other theories, the reader will naturally anticipate parallelism between the genesis of these and the genesis of those described already. That their derivation is wholly unlike all derivations thus far traced, will appear to him improbable. He will, indeed, see that some of the reasons for identifying the adored object with a departed human being, no longer apply. Sun and Moon do not come into the old home or haunt the burial-cave, as certain animals do ; and therefore cannot for this reason be regarded as spirits of the dead. Seas and mountains have not, in common with certain plants, the trait that parts of them when swallowed produce nervous exaltation ; and ascription of divine natures to them cannot thus be accounted for. But there remain, as common causes, the misinterpretation of statements and the misinterpretation of names. Before dealing with these linguistic sources of Nature-worship, let me point out a further imperfection in

undeveloped speech which co-operates with the other imperfections.

In the life of Mrs. Somerville she says that her little brother, on seeing the great meteor of 1783, exclaimed, "O, Mamma, there's the moon rinnin' awa." This description of an inorganic motion by a word rightly applied only to an organic motion, illustrates a peculiarity of the speech used by children and by savages. A child's vocabulary consists mainly of words referring to those living beings which chiefly affect it; and its statements respecting non-living things and motions, show a lack of words free from implications of vitality. The statements of uncivilized men are similarly characterized. The inland negroes who accompanied Livingstone to the west coast, and on their return narrated their adventures, described their arrival at the sea by the words—"The world said to us 'I am finished; there is no more of me.'" Like in form and like in implication were the answers given to a correspondent who was in Ashantee during the late war.

"I exclaimed, 'We ought to be at Beulah by now, surely. But what's that?'" The answer came from our guide. "That, sar, plenty of water live, bimeby we walkee cross hum" "Where's Beulah, then?" "Oh, Beulah live other side hum big hill'"

So too is it with the observation which a Bechuana chief made to Casalis—"One event is always the son of another, and we must never forget the parentage." The general truth that the poorer a language the more metaphorical it is, and the derivative truth that being first developed to express human affairs, it carries with it certain human implications when extended to the world around, is well shown by the fact that even still our word "to be" is traced back to a word meaning "to breathe."

Manifestly this defect in early speech conspires with the defects we have already observed, in favouring personalization. If anything raises the suspicion that an inorganic mass was once a human being, or is inhabited by the ghost of one, the

necessity of using words implying life fosters the suspicion. Taken alone, this defect has probably little influence. Though a fetichistic system logically elaborated, may lead to the conclusion that boiling water is alive; yet I see no evidence that the child who remarks of the boiling water that "it says bubble, bubble," is led by the use of the word "says" to believe the water a living being; nor is there any indication that the negro who represented the earth as saying "I am finished," therefore conceived the earth as a speaking creature. All we can safely say is that, given erroneous personalizations otherwise arising, and the use of these life-implying words will confirm them. In the case of Nature-worship, as in the cases of Animal-worship and Plant-worship, the misleading beliefs due to language take their rise from positive statements *accepted on authority*, and unavoidably misinterpreted.

In thus foreshadowing the conclusion that the worship of conspicuous objects and powers around, conceived as persons, results from linguistic errors, I appear to be indicating agreement with the mythologists. But though misconstruction of words is on both hypotheses the alleged cause, the misconstruction is quite different in kind and the erroneous course of thought opposite in direction. The mythologists hold that the powers of nature, at first conceived and worshipped as impersonal, come to be personalized because of certain characters in the words applied to them; and that the legends concerning the persons identified with these natural powers arise afterwards. Contrariwise, the view here held is that the human personality is the primary element; that the identification of this with some natural power or object is due to identity of name; and that the worship of this natural power thus arises secondarily.

That the contrast between these two modes of interpretation may be clearly understood, let us take an illustration.

§ 185. All winter the beautiful Sunshine, pursued by the

dark Storm, was ever hiding herself—now behind the clouds, now below the mountains. She could not steal forth from her concealment for more than a short time without being again chased with swift footsteps and loud thundering noise; and had quickly to retreat. After many moons, however, the Storm, chasing less furiously and seeing her more clearly, became gentler; and Sunshine, gaining courage, from time to time remained longer visible. Storm failing to capture by pursuit, and softened by her charms, made milder advances. Finally came their union. Then the Earth rejoiced in the moist warmth; and from them were born plants which covered its surface and made it gay with flowers. But every autumn Storm begins to frown and growl; Sunshine flies from him, and the pursuit begins again.

Supposing the Tasmanians had been found by us in a semi-civilized state with a developed mythology containing some such legend as this, the unhesitating interpretation put upon it, after the method now accepted, would be that the observed effects of mingled sunshine and storm were thus figuratively expressed, and that the ultimate representation of Sunshine and Storm as persons who once lived on the earth, was due to the natural mythopœic tendency, which took its direction from the genders of the words.

Contrariwise, supposing such a legend to be found, how would it be explained in pursuance of the hypothesis here set forth? As already shown, birth-names among uncivilized races, taken from the incidents of the moment, often refer to the time of day and the weather. Among such which Mason enumerates, as given by the Karens, are "Evening," "Moon-rising," etc. There is, therefore, nothing anomalous or exceptional in the fact that "Ploo-ra-na-loo-na," meaning Sunshine, is the name of a Tasmanian woman; nor is there anything exceptional in the fact that among the neighbouring Australians "Hail," "Thunder," and "Wind" occur as names. The inference here drawn, therefore, harmonising

with all preceding inferences, is that the initial step in the genesis of such a myth, would be the existence of human beings named Storm and Sunshine ; that from the confusion inevitably arising in tradition between them and the natural agents having the same names, would result this person-alizing of these natural agents, and the ascribing to them human origins and human adventures : the legend, once having thus germinated, being, in successive generations, elaborated and moulded into fitness with the phenomena.

Let us now consider more closely which of these two hypotheses is most congruous with the laws of mind, and with the facts as various races present them.

§ 186 Human intelligence, civilized and savage, in common with intelligence at large, proceeds by the classing of objects, attributes, acts, each with its kind. The very nature of intelligence, then, forbids the assumption that primitive men will gratuitously class unlike things as akin to one another. In proportion as the unlikeness is great must there be great resistance to putting them in the same group. And if, by primitive men, things, wholly unallied are bracketed as of the same nature, some strong mental bias must furnish the needful coercive force.

What degree of likeness can we find between a man and a mountain? Save that they both consist of matter, scarcely any kinship can be pointed out between them. The one is vast, the other relatively minute ; the one of no definite shape, the other symmetrical ; the one is fixed, the other locomotive ; the one is cold, the other warm ; the one is of dense substance, the other quite soft ; the one has little internal structure and that irregular, the other is elaborately structured internally in a definite way. Hence the classing of them in thought as akin, is repugnant to the laws of thought, and nothing but unlimited faith can cause a belief in their alleged relationship as progenitor and

progeny. There are, however, misinterpreted statements which lead to acceptance of this belief.

Read first the following passages, from Bancroft's *Native Races of the Pacific States*.—

"Ikanam, the creator of the universe, is a powerful deity among the Chinooks, who have a mountain named after him from a belief that he there turned himself into stone."

"The Californian tribes believe * * * the Navajos came to light from the bowels of a great mountain near the river San Juan"

"The citizens of Mexico and those of Tlatelolco were wont to visit a hill called Cacatepec, for they said it was their mother"

Similarly of the Mexicans Prescott writes—"A puerile superstition of the Indians regarded these celebrated mountains as gods, and Iztaccihuatl as the wife of her more formidable neighbour" Popocatepetl. Of the Peruvians, described by Arriaga as worshipping the snow-mountains, we read that "at Potosi there is a smaller hill, very similar to a larger one, and the Indians say that it is its son, and call it * * * the younger Potosi." Now observe the clue to these beliefs furnished by Molina's statements. He says the principal *huaca* of the Yncas was that of the hill, *Huana-cauri*, whence their ancestors were said to have commenced their journey. It is described as "a great figure of a man." "This *huaca* was of Ayar-caclli, one of the four brothers who were said to have come out of the cave at Tampu." And Molina gives a prayer addressed to it:—"O *Huana-cauri*! our father, may * * * thy son, the Ynca, always retain his youth, and grant that he may prosper in all he undertakes. And to us, thy sons and descendants," etc.

One way in which a mountain comes to be worshipped as ancestor, is here made sufficiently manifest. It is the place whence the race came, the source of the race, the parent of the race: the distinctions implied by the different words here used being, in rude languages, inexpressible. Either the early progenitors of a tribe were dwellers in caves on the mountain; or the mountain, marking most conspicuously the elevated region whence they came, is identified as the object

whence they sprang. We find this connexion of ideas elsewhere. Various peoples of India who have spread from the Himalayas to the lower lands, point to the snowy peaks as the other world to which their dead return. Among some, the traditional migration has become a genesis, and has originated worship. Thus the Santals regard the eastern Himalayas as their natal region; and Hunter tells us that, "the national god of the Santals is Nurang Buru, the great mountain," who is "the divinity who watched over their birth," and who "is invoked with bloody offerings."

When we remember that even now among ourselves, a Scotch laird, called by the name of his place, is verbally identified with it, and might in times when language was vague and ideas chaotic, have readily become confounded in legend with the high stronghold in which he lived; when we remember, too, that even now, in our developed language, the word "descend" means either coming down from a higher level or coming down from an ancestor, and depends for its interpretation on the context, we cannot, I think, in presence of the above facts, doubt that mountain-worship in some cases arises from mistaking the traditional source of the race for the traditional parentage of the race. This interpretation strengthens, and is strengthened by, a kindred interpretation of tree-worship given in the last chapter.

There is another possible linguistic cause for conceptions of this kind. "Mountain" and "Great Mountain" may be used by primitive men as nicknames metaphorically expressing great size or great importance. Elsewhere I have suggested that a personal name thus arising, may have initiated the belief of the New Zealand chief, who claimed the neighbouring volcano, Tongariro, as his ancestor: such ancestor possibly having acquired this metaphorical name as expressive of his fiery nature and his bursts of fury. One positive fact only can I give in support of the belief that in some cases mountain-worship thus arises. Writing of

the Araucanians, and stating that "there is scarcely a material object which does not furnish them with a discriminative name" of a family, Thompson specifies "Mountains" as among their family names.

§ 187. Save in respect of its motion, which, however, is of an utterly different character, the Sea has even less in common with a man than a mountain has: in form, in liquidity, in structurelessness, it is still more unlike a person. Nevertheless the Sea has been personalized and worshipped, not only in the ancient East, but also in the West. Arriaga tells us of the Peruvians that "all who descend from the Sierra to the plains worship the sea when they approach it, and pull out the hair of their eyebrows, and offer it up, and pray not to get sick." How could the conception leading to this practice have arisen?

We have seen that confusing the derivation from a place with the derivation of parenthood, has led to the worship both of mountains and of the trees composing a forest once dwelt in. Ocean-worship seems to have had, in some cases, a parallel genesis. Though when we call sailors "sea-men," our organized knowledge and developed language save us from the error which literal interpretation might cause, yet a primitive people on whose shores there arrived unknown men coming from an unknown source, and who spoke of them as "men of the sea," would be very apt thus to originate a tradition describing them as coming out of the sea—as being produced by it. The change from "men of the sea" to "children of the sea" is an easy one—one paralleled by figures of speech among ourselves; and from the name "children of the sea" legend would naturally evolve a conception of the sea as generator or parent. Trustworthy evidence in support of this conclusion, I cannot furnish. Though, writing as a Spaniard, and describing the Peruvians, Benzoni says—"They think that we are a congelation of the sea, and have been nourished by the

froth"; yet this statement, reminding us of the Greek myth of Aphrodite, is attributed to a verbal misconstruction of his. Still it may be held that by a savage or semi-civilized people, who are without even the idea of lands below the ocean-horizon, there can hardly be formed any other conception of marine invaders who have no apparent origin but the ocean itself.

That belief in descent from the Sea as a progenitor also arises by misinterpretation of individual names, seems not improbable. Some indirect evidence is yielded by the fact that a religious teacher who appeared among the Iroquois about 1800 (probably a missionary) was called "Handsome Lake"; and if "lake" may become a proper name, there is no stretch of probability in the supposition that ocean may do so. There is direct evidence, however. We have the statement of Garcilasso, already quoted in another connexion (§ 164), that the Sea was claimed by some clans of the Peruvians as a family ancestor.

§ 188. If asked to instance a familiar appearance still less human in its attributes than a mountain or the sea, we might after reflection hit upon the one to be here dealt with, the Dawn, as perhaps the most remote imaginable: having not even tangibility, nor definite shape, nor duration. Was the primitive man, then, led by linguistic needs to personalize the Dawn? And having personalized it did he gratuitously invent a specific biography, or rather many biographies for it? Affirmative answers are currently given; but, as it seems to me, with extremely little warrant.

Treating of the dawn-myth, Prof. Max Muller, in his *Lectures on the Science of Language*, takes first Saramâ as one of its embodiments. He quotes with qualified assent Prof. Kuhn's "conclusion that Saramâ meant storm." He does not doubt that "the root of Saramâ is sar, to go." He says—"Admitting that Saramâ meant originally the runner, how does it follow that the runner was meant for

storm?" Recognizing the fact that an allied word meant wind and cloud, he alleges that this is habitually masculine in Sanscrit; but admits that if the Veda gave Saramâ the "qualities of the wind" this incongruity "would be no insurmountable objection." He then gives Saramâ's adventures in search of the cows; and says it yields no evidence that Saramâ is "representative of the storm." After saying that in a fuller version of the story, Saramâ is described as "the dog of the gods" sent by Indra "to look for the cows"—after giving from another source the statements that Saramâ, refusing to share the cows with them, asks the robbers for a drink of milk, returns and tells a lie to Indra, is kicked by him, and vomits the milk, Prof. Max Muller gives his own interpretation. He says—

"This being nearly the whole evidence on which we must form our opinion of the original conception of Saramâ, there can be little doubt that she was meant for the early dawn, and not for the storm"

Here, then, we have a sample of myth-rendering. It is agreed that the root is *sar*, to go; from which one distinguished philologist infers that Saramâ meant the runner and therefore the storm (allied words meaning wind and cloud); while another distinguished philologist thinks this inference erroneous. Saramâ in the legend is a woman; and in some versions a dog. It is, however, concluded that she is the dawn, because an epithet applied to her means quick; and because another epithet means fortunate, and because she appears before Indra; and because of sundry metaphors which, if cows stand for clouds, may be applied figuratively to mean the dawn. On the strength of these vague agreements Prof. Max Muller thinks—

"The myth of which we have collected the fragments is clear enough. It is a reproduction of the old story of the break of day. The bright cows, the rays of the sun or the rain-clouds—for both go by the same name—have been stolen by the powers of darkness, by the Night and her manifold progeny," etc, etc

Thus, notwithstanding all the discrepancies and contra-

dictions, and though the root of the name gives no colour to the interpretation, yet because of certain metaphors (which in primitive speech are so loosely used as to mean almost anything) we are asked to believe that men person-alized a transitory appearance as remote from humanity as can be conceived

Whatever difficulties stand in the way of the alternative interpretation, it has facts instead of hypotheses to start from. It may be that sometimes Dawn is a complimentary metaphorical name given to a rosy girl; though I cannot furnish proof of this. But that Dawn is a birth-name, we have clear proof. Naming the newly-born from concurrent events, we have seen to be a primitive practice. Of names so derived among the Karens, Mason instances "Harvest," "February," "Father-returned." He also, as we have seen (§ 185), shows us that the times of the day are similarly utilized; and then, among the names thus derived, he gives "Sunrise." South America supplies a kindred instance. In the account of the captivity of Hans Stade, lately published by the Hakluyt Society, the narrator says he was present at the naming of a child among the Tupis, who was called Koem—the morning (one of its forefathers having also been similarly named); and Captain Burton, the editor, adds in a note that Coéma piranga means literally the morning red or Aurora. If, then, Dawn is an actual name for a person—if where there prevails this mode of distinguishing children, it has probably often been given to those born early in the morning; the traditions concerning one of such who became noted, would, in the mind of the uncritical savage, believing firmly and literally whatever his fathers told him, lead to identification with the dawn; and the adventures would be interpreted in such a manner as the phenomena of the dawn made most feasible. Further, in regions where this name had been borne either by members of different adjacent tribes, or by members of the same tribe living at different times, incongruous gene-

alogies and conflicting adventures of the dawn would result, in agreement with what we find.

§ 189. Is there a kindred origin for worship of the Stars? Can these also become identified with ancestors? This seems difficult to conceive, and yet there are facts justifying the suspicion that it has been so.

We read that the Jews regarded the stars as living beings who in some cases transgressed and were punished, and that kindred notions of their animation existed among the Greeks. If we ask for the earlier forms of such beliefs, which now appear to us so strange, savages supply them. Erskine says that "in Fiji large 'shooting stars' are said to be gods; smaller ones, the departing souls of men." Here we have a definite implication that human beings somehow get up into the heavens. There is a like implication in the Tasmanian tradition that fire was brought them by two black-fellows, who threw the fire among the Tasmanians, and after staying awhile in the land, became the two stars, Castor and Pollux. Possibly the genesis of this story was that the coupled lights of these stars were fancied to be the distant fires lighted by these men after they went away. That such a genesis is not unlikely, is shown by an allied conception of the North Americans, who say that the Milky Way is "the 'Path of Spirits,' 'the Road of Souls,' where they travel to the land beyond the grave, and where their *camp-fires* may be seen blazing as brighter stars." It harmonizes, too, with the still more concrete belief of some North Americans, that their medicine men have gone up through holes in the sky, have found the sun and moon walking about there like human creatures, have walked about with them, and looked down through their peepholes upon the Earth below.

Definite explanation of such ideas is very difficult so long as we frame hypotheses only, but it becomes less difficult when we turn to the facts. These same peoples furnish a

legend yielding us a feasible solution. It is contained in Bancroft's *Native Races of the Pacific States*, vol. III, pp. 138-9, quoted from Power's *Pomo*. First noting that Robinson describes "certain other Californians as worshipping for their chief god something in the form of a stuffed coyote," read this legend of the Coyote, current among one of the Californian tribes—the Cahrocs. The Coyote was "so proud that he determined to have a dance through heaven itself, having chosen as his partner a certain star that used to pass quite close by a mountain where he spent a good deal of his time. So he called out to the star to take him by the paw and they would go round the world together for a night, but the star only laughed, and winked in an excessively provoking way from time to time. The Coyote persisted angrily in his demand, and barked and barked at the star all round heaven, till the twinkling thing grew tired of his noise and told him to be quiet and he should be taken next night. Next night the star came quite up close to the cliff where the Coyote stood, who leaping was able to catch on. Away they danced together through the blue heavens. Fine sport it was for a while, but oh, it grew bitter cold up there for a Coyote of the earth, and it was an awful sight to look down to where the broad Klamath lay like a slack bow-string and the Cahroc villages like arrow-heads. Woe for the Coyote! his numb paws have slipped their hold on his bright companion, dark is the partner that leads the dance now, and the name of him is Death. Ten long snows the Coyote is in falling, and when he strikes the earth he is 'smashed as flat as a willow-mat'—Coyotes must not dance with stars."

When we remember that this conception of the heavens as resting on, or adjacent to, the mountain tops, is general among the uncivilized and semi-civilized; and that access to the heavens after some such method as the one described, presents no difficulty to the uncritical mind of the primitive man; the identification of stars with persons will seem less incomprehensible. Though the ancestral coyote meets with a catastrophe, like catastrophes are not necessarily alleged of other ancestral animals who thus get into the heavens. Special hills, and special groups of stars seen to rise from behind them, being identified as those referred to in the legends, the animal-ancestors said to have ascended may give the names to constellations. Here, at least, seems to be

a feasible explanation of the strange fact, that the names of animals and men were, in the earliest times, given to clusters of stars which in no way suggest them by their appearances.

That misinterpretation of proper names and metaphorical titles has played a part in this case, as in other cases, is possible. Wallace tells us that one of the Amazon tribes is called "Stars." By Rajah Brooke the name of a Dyak chief is rendered—"the bear of Heaven." And in Assyrian inscriptions, Tiglath Pileser is termed "the bright constellation," "the ruling constellation." Literal acceptance of legends containing such names has, in the earliest stages, not improbably led to identification.

If the ancestor, animal or human, supposed thus to have migrated to the heavens, becomes identified with certain stars, we get a clue to the fancies of astrology. A tribal progenitor so translated, will be conceived as still caring for his descendants, while the ancestors of other tribes (when conquest has united many into a nation) will be conceived as unfriendly. Hence may result the supposed good or ill fortune of being looked down upon at birth by this or that star.

§ 190. Supposed accessibility of the heavens makes similarly easy the identification of the Moon with a man or woman. We may therefore expect a prevalence of stories in which the Moon is represented as a being who had a terrestrial origin.

Sometimes the traditional person is believed to reside in the Moon, as by the Loucheux branch of the Tinneh, who, while supplicating him for success in hunting, say that he "once lived among them as a poor ragged boy." More frequently, however, there is an alleged metamorphosis. According to Hays, the Esquimaux think sun, moon, and stars "are spirits of departed Esquimaux, or of some of the lower animals;" and in like manner we learn from Angas

that "the South Australians believe that the sun, moon, etc., are living beings who once inhabited the earth." Clearly, then, certain low races, who have no worship of the heavenly bodies, have nevertheless personalized these by a vague identification of them with ancestors in general. Among them biographies of the Moon do not occur; but we find biographies among other races, and especially among those sufficiently advanced to keep up traditions. The Chibchas say that when on Earth, Chia taught evil, and that Bochica, their deified instructor, "translated her to heaven, to become the wife of the Sun and to illuminate the nights without appearing at daytime [on account of the bad things she had taught], and that since then there has been a Moon." Similarly, Mendieta says the Mexican account of the creation of the Moon was that, "together with the man who threw himself into the fire and came out the Sun, another went in a cave and came out the Moon."

Has identification of the Moon with persons who once lived, been caused by misinterpretation of names? Indirect evidence would justify us in suspecting this, even were there no direct evidence. In savage and semi-civilized mythologies, the Moon is more commonly represented as female than as male, and it needs no quotations to remind the reader how often, in poetry, a beautiful woman is either compared to the Moon or metaphorically called the Moon. That the Moon has been used in primitive times as a complimentary name for a woman, may hence, I think, be inferred. And, if so, erroneous identification of person and object, originated a lunar myth wherever the woman so named survived in tradition.

To this, which is a hypothetical argument, is to be added an argument definitely based on fact. Whether it supplies complimentary names or not, the Moon certainly supplies names for children. Among those enumerated by Mason as given by the Karens, is "Full Moon." Obviously, peoples whose custom it is to distinguish children by the

incidents of their birth, using, as in Africa, days of the week, and as we have seen in other cases, times of the day, will also use phases of the Moon, and since many peoples have this custom, naming after a phase of the Moon has probably been by no means uncommon, and subsequent identifications with the Moon not rare.

And here a significant correspondence may be noted. Birth-names derived from the Moon will habitually refer to it either as rising or setting, or else as in one of its phases—waxing, full, waning—a state of the Moon, rather than the Moon itself, will be indicated. Now the Egyptian goddess Bubastis, appears to have been the new Moon (some evidence implies the full)—at any rate a phase. The symbolization of Artemis, too, implies such a limitation, as does also that of Selene. And in his *Aryan Mythology*, Mr. Cox tells us that Iô is “pre-eminently the horned” or young Moon, while Pandia is the full Moon. How do these facts harmonize with the current interpretation? Is the tyranny of metaphor so great that, of itself, it compels this change of personality?

§ 191. Naturally, we may expect to find that, in common with the Stars and the Moon, the Sun has been personalized by identification with a traditional human being.

Already implied by some of the quotations respecting the Moon, this is implied more distinctly by facts now to be given. The original parent of the Comanches, like themselves but of gigantic stature, lives, they say, in the Sun. So, too, “the Chechemecas called the Sun their father.” Writing of the Olchones, Bancroft says—“The sun here begins to be connected, or identified by name, with that great spirit, or rather, that Big Man, who made the earth and who rules in the sky,” and he also says of the Tinneh that “some of them believe in a good spirit called Tihugun, ‘my old friend,’ supposed to reside in the sun and in the moon.” In the language of the Salve, one of the

Orinoco tribes, the name for the Sun is "the man of the Earth above." Among the less civilized American peoples, then, the implication of original existence on Earth and subsequent migration to the sky, is general only. The conception is much upon a level with that of the Barotse, who, when asked by Livingstone whether a halo he saw round the Sun portended rain, gave the reply—"O no, it is the Barimo [gods or departed spirits] who have called a picho; don't you see they have the Lord in the centre?" the belief doubtless being that as the rest of the celestial assemblage had once been on Earth, so, too, had their chief. But among peoples more advanced in civilization and having traditions proportionately developed, the terrestrial personality of the Sun is definitely stated. Writing of the Mexicans, Camargo says—

"According to the Indians [of Tlascala] the Sun was a god so leprous and sick that he could not move. The other gods pitied him, and constructed a very large oven and lighted an enormous fire in it, to put him out of pain by killing him, or to purify him."

The Quiché tradition, as given by Bancroft, is that after "there had been no sun in existence for many years,"

"the gods being assembled in a place called Teotihuacan, six leagues from Mexico, and gathered at the time round a great fire, told their devotees that he of them who should first cast himself into that fire, should have the honour of being transformed into a sun."

Among the Zapotecs, there is a legend concerning the ancestral cacique of Ulizteca, who, being a mighty archer,

"shot there against the great light even till the going down of the same, then he took possession of all that land, seeing he had grievously wounded the sun, and forced him to hide behind the mountains."

More specific still is a kindred story of the Mexicans, forming a sequence to one above cited. When the god who became the Sun by throwing himself into the fire, first rose, he stood still, and when the other gods sent a messenger ordering him to go on,

"the Sun replied that it would not go on until it had destroyed them. Both afraid and angry at this answer, one of them, called Cith, took a

bow and three arrows, and shot at its fiery head; but the Sun stooped, and thus avoided being hit. The second time he wounded its body, and also the third time. In rage, the Sun took one of the arrows and shot at Citli, piercing his forehead, and thus killing him on the spot."

Nor does this exhaust the cases which Mexican traditions furnish. Waitz, after expounding the Sun-myths in which he figures, concludes that "Quetzalcoatl was originally a man, a priest in Tula, who rose as a religious reformer among the Toltecs, but was expelled by the adherents of Tezcatlipoca."

By the mythologists these stories, in common with kindred stories of the Aryans, are without hesitation said to result from personalizations figuratively expressing the Sun's doings, and they appear to have no difficulty in believing that men not only gratuitously ascribed human nature to the Sun, but gratuitously identified him with a known man—with a priest or with a chief. Doubtless the Mexican tradition given by Mendieta, "that at one time there were five suns; and the fruits of the earth did not grow well, and the men died," will in some way be explained as harmonizing with their hypothesis. Here, however, the interpretation adopted, like preceding interpretations, does not imply that these legends grew out of pure fictions; but that, however much transformed, they grew out of facts. Even were there no direct evidence that solar myths have arisen from misapprehensions of narratives respecting actual persons, or actual events in human history, the evidence furnished by analogy would warrant the belief. But the direct evidence is abundant.

One source of these solar myths, is the literal acceptance of figurative statements concerning the quarter whence the race came. Already we have seen that emergence of a people from a forest, confounded in tradition with emergence from the trees forming it, has led to the worship of trees as ancestors, and that the story of migration from a distant mountain has become, through defect of language, changed into the story of descent from the moun-

tain as a progenitor. The like has happened with peoples who have migrated from a locality marked by the Sun. On referring to § 112, where are given the ideas of various peoples respecting that other world whence their forefathers came, and to which they expect to return after death, it will be seen that its supposed direction is usually either east or west the obvious cause being that the places of sunrise and sunset, ranging through considerable angles of the horizon on either side, serve as general positions on the horizon to which more northerly and southerly ones are readily approximated by the inaccurate savage, in the absence of definite marks. "Where the Sun rises in heaven," is said by the Central American, to be the dwelling-place of his gods, who were his ancestors (§ 149), and the like holds in many cases. Describing the Dinneh (or Tinneh), Franklin says each tribe, or horde, adds some distinctive epithet taken from the name of the river, or lake, on which they hunt, or the district from which they last migrated. Those who come to Fort Chipewyan term themselves "Saw-eesaw-dinneh—Indians from the rising Sun." Now may we not suspect that such a name as "Indians from the rising Sun," will, in the legends of people having an undeveloped speech, generate a belief in descent from the Sun? We ourselves use the expression "children of light", we have the descriptive name "children of the mist" for a clan living in a foggy locality, nay, we apply the phrase "children of the Sun" to races living in the tropics. Much more, then, will the primitive man in his poverty-stricken language, speak of those coming from the place where the Sun rises as "children of the Sun" That peoples even so advanced as the Peruvians did so, we have clear proof Read this passage from Mr. Markham (*Narratives*, p 12):—

"The universal tradition pointed to a place called Paccari-tampu, as the cradle or point of origin of the Yncas It was from Cuzco, the nearest point to the sun-rising, and as the sun was chosen as the *pacarisca* [origin] of the Yncas, the place of their origin was at first

assigned to Paccan-tampu But when their conquests were extended to the Collao, they could approach nearer to the sun, until they beheld it rising out of lake Titicaca, and hence the inland sea became a second traditional place of royal origin "

When with this we join the facts that the Yncas, who otherwise carried ancestor-worship to so great an extent, were also predominantly worshippers of the Sun as ancestor, and that when the Ynca died he was "called back to the mansion of his father, the Sun", we have, I think, warrant for concluding that this belief in descent from the Sun resulted from misapprehension of the traditional fact that the Ynca-race emerged from the land where the Sun rises Further evidence of having this meaning is yielded by the names given by Mexicans and Chibchas to the Spaniards. According to Herrera, the Mexicans "called Cortes the offspring of the Sun." And as the Spaniards came to them from the region of the rising Sun, we have a like cause preceding a like effect. Though apparently not for the same reason, the Chibchas, too, made solar heroes of the Spaniards. Herrera says—"when the Spaniards first entered this kingdom, the natives were in a great consternation, looking upon them as the children of the Sun and Moon"· a statement made in other words by P. Simon, and also by Lugo, who tells us that in the Chibcha language, "*Suá* means the Sun, and *Suê* the Spaniard. The reason why this word *suê* is derived from *suâ* is that the ancient Indians, when they saw the first Spaniards, said that they were children of the Sun."

In this case, too, as in preceding cases, misinterpretation of individual names is a factor In the essay which contained a rude outline of the argument elaborated in the foregoing chapters, I contended that by savage and semi-civilized men, "Sun" was likely to be given as a title of honour to a distinguished man I referred to the fact that such complimentary metaphors are used by poets: instancing from *Henry VIII* the expression—"Those suns of glory,

those two lights of men"; to which I might have added the lines from *Julius Cæsar*—

" O setting sun,
As in thy red rays thou dost sink to-night,
So in his red blood Cassius' day is set
The sun of Rome is set!"

And I argued that among primitive peoples, necessarily speaking more figuratively than we do, and greatly given as they are to flattery, "the Sun" would probably be a frequent name of laudation. Facts in justification of this inference were not then at hand; but I can now give some. Here is a sentence from Prescott's *Mexico*, bk. III., ch. 5 :—

"The frank and joyous manneis of Alvarado made him a great favourite with the Tlascalans, and his bright, open countenance, fair complexion, and golden locks gave him the name of *Tonutuh*, Sun "

That the Peruvians, in a kindred spirit, gave a modification of the name to those who were mentally superior, is shown by the statement of Garcilasso, that they "were so simple, that any one who invented a new thing was readily recognized by them as a child of the Sun." And then we have evidence that in these regions the title sometimes given in compliment, was sometimes arrogantly assumed. In the historic legend of the Central Americans, the *Popol Vuh*, is described the pride of Vucub-Cakix, who boasted that he was Sun and Moon.

Once more we have, as a root for a Sun-myth, the birth-name. Among names Mason sets down as given by the Karens, is "Yellow Rising Sun", and though he speaks of "a handsome young person" as thus called, so implying that it is a complimentary name, yet considering that these people use "Evening," "Moon-rise," "Sun-rise," "Full Moon," as birth-names, it seems probable that "Rising Sun" is also a birth-name. It would be anomalous were celestial incidents thus used, with the exception of the most striking one.

And now mark a significant congruity and a significant incongruity, parallel to those we marked in the case of the Moon's phases. Birth-names taken from the Sun must refer to the Sun at some part of his course—the rising Sun, the soaring Sun, the setting Sun, according to the hour of the birth, and complimentary names taken from the Sun, may express various of his attributes, as “the glory of the Sun,” “the Sun's brightness,” etc. Hence no difficulty is presented by the fact Wilkinson gives, that “the Egyptians made of the Sun several distinct deities as the intellectual Sun, the physical orb, the cause of heat, the author of light, the power of the Sun, the vivifying cause, the Sun in the firmament, and the Sun in his resting-place” [Compare with king's names on p. 412] On the other hand, how do the mythologists reconcile such facts with their hypothesis? Is the linguistic necessity for personalizing so great that eight distinct persons must be assumed to embody the Sun's several attributes and states? Are we to understand that the Aryans, too, were led solely by the hypostasis of descriptions to suppose Hyperion, “the high-soaring Sun,” to be one individual, and Endymion, “the Sun setting,” to be another individual: both being independent of “the separate divinity of Phoibos Apollôn”? Did the mere need for concreting abstracts, force the Greeks to think that when the Sun was thirty degrees above the horizon he was one person who had such and such adventures, and that by the time he had got within ten degrees of the horizon he had changed into a person having a different biography? That the mythologists cannot think this I will not say; for their stores of faith are large. But the faith of others will, I imagine, fall short here, if it has not done so before.

§ 192. When the genesis of solar myths after the manner I have described, was briefly indicated as a part of the general doctrine set forth in the essay above referred to, sundry resulting correspondences with the traits of such

myths were pointed out. The fact that conspicuous celestial objects, in common with the powers of nature at large, were conceived as male and female, was shown to be a sequence. The fact that in mythologies the Sun has such alternative names as "the Swift One," "the Lion," "the Wolf," which are not suggested by the Sun's sensible attributes, was shown to be explicable on the hypothesis that these were additional complimentary names given to the same individual, after the fashion of barbarous peoples, who habitually multiply flattering metaphors. Further, the strange jumbling of celestial phenomena with the adventures of earth-born persons, was explained as an inevitable consequence of endeavours to reconcile the statements of tradition with the evidence of the senses. And once more it was suggested that by the fusion of local legends concerning persons thus named, into a mythology co-extensive with many tribes who were united into a nation, there would result conflicting genealogies and biographies of the personalized Sun. While able then to illustrate but briefly these positions, I alluded to evidence which was forthcoming. Of such evidence I have now given an amount which fulfils the tacit promise made, and goes far to justify the inference drawn. I did not then, however, hope to do more than make the inference highly probable. But while collecting materials for the foregoing chapters, I have come upon a passage in the records of the ancient Egyptians which, I think, gives conclusiveness to the argument. It is in the third Salier Papyrus, translated by Prof. Lushington, and published in the *Transactions of the Society of Biblical Archaeology*, vol. iii. From this document, recording the triumphs of Ramses II, I have already quoted parts illustrating the ancient belief in the supernatural strength given by an ancestral ghost who has become a god; and more recently I have quoted from it a phrase illustrating the complimentary application of an animal-name to a conquering monarch. Here, from the laudatory

address of the defeated, praying for mercy, I quote in full the significant sentence —

“Horus, conquering bull, dea to Ma, Prince guarding thy army, valiant with the sword, bulwark of his troops in day of battle, king mighty of strength, great Sovran, *Sun* powerful in truth, approved of Ra, mighty in victories, Ramses Miamon ”

The whole process described above as likely to occur, is thus shown as actually occurring. Observe all the correspondences. The deity to whom Ramses says he has sacrificed 30,000 bulls, and to whom he prays for supernatural aid, is his ancestor. “I call on my father Ammon,” he says; and the defeated say to him—“truly thou art born of Ammon, issue of his body.” Further, Ramses, himself described as performing the feats of a god, is spoken of as though a god the defeated call him “giver of life for ever like his father Ra.” Thus regarded as divine, he receives, as we find warriors among the semi-civilized and savage still doing, a multiplicity of complementary titles and metaphorical names; which, being joined to the same individual, become joined to one another: Ramses is at once the King, the Bull, the Sun. And while this record gives the human genealogy of Ramses and his achievements on Earth, its expressions point to his subsequent apotheosis, and imply that his deeds will be narrated as the deeds of the “conquering bull” and of “the Sun.” Remembering that at the deaths even of ordinary Egyptians, there were ceremonial eulogies by priests and others, who afterwards, at fixed intervals, repeated their praises, we cannot doubt that in laudations of a king who became a god after death, carried on in still more exaggerated language than during his life, there persisted these metaphorical titles. And if, as pointed out above, the Egyptian language, even in historic times, could not discriminate between a name and the act of naming, it is manifest that the distinction between the person and the thing he was named after, must have been difficult to ex-

press, and that when the language was still less developed the two were inevitably confounded.*

To me it seems obvious that in this legend of the victorious Ramses, king, conqueror, bull, sun, and eventually god, we have the elements which, in an early stage of civilization, generate a solar myth like that of Indra. To say that when orally transmitted for generations among a less advanced people, a story such as this would not result in a human biography of the Sun; is to deny a process congruous with the processes we find going on, and to assume an historical accuracy which was not possible. While to allege, instead, that the Sun may not only be affiliated on human parents, but may be credited with feats of arms as a king, while he is also a brute, and this solely because of certain linguistic suggestions, is to allege that

* While making for me a fuller examination of these documents than I was myself able to make, an assistant has come upon certain verifying facts

In the (great) Harris Papyrus (translated by Prof. Eisenlohr), leaf 76, lines 1 and 2, Ramses III is represented as saying—" [My father] set in his horizon like the nine gods There were made to him the ceremonies of Osiris navigating in his royal bark on the surface of the river He descended to his eternal house in the west of Thebes "

Here again are several royal names taken from Mr Edw Hawkins' preface to the second volume of the *Select Papyri* —

The King, the son of the Sun, Hanaa

The King, the Sun of creation, the son of the Sun, Hannutf

The King, the first to attend to the Earth, the son of the Sun, Sebakemshaf

The King, the Sun becoming victorious, the son of the Sun, Ta-aa

The King, the Sun orderer of creation, the son of the Sun, Kames

Now, though "Sun," used in these cases as an ordinary royal title, is restrained, by union with several meaningless proper names, from generating a tradition of identity, yet before such proper names came into use, identification would be unchecked`

That the "father Ammon," referred to in the text as the supreme god, was the remote ancestor, is further implied by the statement of Brugsch that "the cult of the Ammon of the Ramesseum was of a funeral character"

I may add the significant fact that in the hieroglyphics, one and the same "determinative" means, according to the context, god, ancestor, august person.

men disregard the evidence of their senses at the prompting of reasons relatively trivial

§ 193. Little then as first appearances suggest it, the conclusion warranted by the facts, is that Nature-worship, like each of the worships previously analyzed, is a form of ancestor-worship; which has lost, in a still greater degree, the external characters of its original

Partly by confounding the parentage of the race with a conspicuous object marking the natal region of the race, partly by literal interpretation of birth-names, and partly by literal interpretation of names given in eulogy, there have been produced beliefs in descent from Mountains, from the Sea, from the Dawn, from animals which have become constellations, and from persons once on Earth who now appear as Moon and Sun. Implicitly believing the statements of forefathers, the savage and semi-civilized have been compelled grotesquely to combine natural powers with human attributes and histories, and have been thus led into the strange customs of propitiating these great terrestrial and celestial objects by such offerings of food and blood, as they habitually made to other ancestors

Between this group of phenomena and the preceding groups, there is, then, entire congruity, and the applicability of one interpretation to them all, notwithstanding its apparent inapplicability, is a further reason for regarding that interpretation as true.

CHAPTER XXV

DEITIES.

§ 194. IN the foregoing five chapters the genesis of deities has been so fully set forth by implication, that there seems no need for a chapter dealing directly with the subject. But though we have dealt with those classes of deities in which the human personality is greatly disguised; there remains to be dealt with the class of deities which has arisen by simple idealization and expansion of the human personality. For while some men have, by the misinterpretation of traditions, had their individualities merged in those of natural objects; the individualities of others have survived with anthropomorphic attributes.

This last class, always co-existing with the other classes, eventually becomes predominant probably, as before hinted, through the agency of proper names that are less and less connotative and more and more denotative. So long as men were named after natural objects, they failed to survive in tradition under their human forms, and the worship of them as ancestors became the worship of the things they were nominally identified with. But when there arose such proper names as were not also borne by objects, men began to be preserved in story as men. It became possible for ghosts to retain their anthropomorphic individualities

long after the deaths of contemporaries, and so an anthropomorphic pantheon resulted

Already in the chapter on "Ancestor-worship in General," the initiation of this class of deities has been indicated, and now, having traced the evolution of the other classes, we must trace the evolution of this most important class.

§ 195 Like an animal, a savage fears whatever is strange in appearance or behaviour. Along with this unparalleled quality there is no knowing what other unparalleled qualities may go. He feels endangered by these capacities which transcend those he is familiar with; and behaves to the possessor of them in a way betraying his consciousness of danger. As we saw, he regards as supernatural whatever he cannot comprehend. His mental attitude is well illustrated by the two Krumen named by Thompson, who, when taken over a ship, said it "was for certain an uncreated thing—a thing come of itself, and never made by human hands" And this supposed supernaturalness of the unaccountable, holds alike of a remarkable object and of a remarkable man. If the Chippewas "do not understand anything, they immediately say it is a spirit"; and our informant, Buchanan, adds that a man of extraordinary talent "is said to be a spirit."

In various cases we find the native equivalent for god is thus indiscriminately applied to an incomprehensible object and to a person whose powers are incomprehensible. The Fijian name for a divine being, *kalou*, means also "anything great or marvellous." And while in pursuance of this conception the Fijians declared a printing-press to be a god, they also applied the word to their European visitors 'You are a *kalou*,' "Your countrymen are gods" So, too, it is with the Malagasy, who speak of their king as a god, and by whom, according to Ellis, whatever is new or useful or extraordinary is called a god. Silk, "rice, money, thunder and lightning, and earthquakes, are all called gods. Their ancestors and a deceased sovereign

they designate in the same manner." A book, too, is a god, and "velvet is called by the singular epithet—Son of God." It is the same with the man-worshipping Todas. As Marshall tells us respecting the meanings of *Dêr*, *Swâmi* (gods, lords,) as used by them, "there is a tendency for everything mysterious or unseen to ripen into *Dêr*; cattle, relics, priests, are confused in the same category, until it would seem that *Dêr*, like *Swâmi*, is truly an adjective-noun of eminence"

And now we shall no longer find it difficult to understand how the title god, is, in early stages of progress, given to men in ways which seem to us so monstrous. Not meaning by the title anything like what we mean, savages naturally use it for powerful persons, living and dead, of various kinds. Let us glance at the several classes of them.

§ 196 We may fitly begin with individuals whose superiority is the least definite—individuals who are regarded by others, or by themselves, as better than the rest.

A typical case is furnished by the Todas above named. Mr. Marshall, describing the character of the pââlâl, a kind of holy milkman or priest among them, thus gives part of a conversation with one.—

"'Is it true that Todas salute the sun?' I asked 'Lschâkh' he replied, 'those poor fellows do so, but me,' tapping his chest, 'I, a god' why should I salute the Sun?' At the time, I thought this a mere ebullition of vanity and pride, but I have since had opportunity of testing the truth of his speech. The pââlâl for the time being is not merely the casket containing divine attributes, but is *himself a god*"

Mr. Marshall further tells us that "the pââlâl being himself a god may with propriety mention the names of his *fellow-gods*, a license which is permitted to no one else to do." This elevation to godhood of a living member of the tribe, who has some undefined superiority, is again exemplified among the Central Americans. Mr. Montgomery thus de-

scribes the Indians of Taltique as adoring such a god, with all the ordinary ceremonials —

“ This was no other than an old Indian, whom they had dressed up in a peculiar way and installed in a hut, where they went to worship him, offering him the fruits of their industry as a tribute, and performing in his presence certain religious rites, according to their ancient practice ”

Clearly people who for some unspecified reason regard one of their number with awe, and propitiate him, probably under the belief that he can bring good or evil on them, may thus originate a deity. For if the ghost in general is feared, still more feared will be the ghost of any one distinguished during life. Probably there is no ancestor-worship but what shows this tendency to the evolution of a predominant ghost from a predominant human being. We have seen how, by the Amazulu, the remembered founder of the family is the one chiefly propitiated; and the implication is that this founder was in some way superior. We have seen, too, how among the Central Americans Tamagastad and Çipattoval were the remotest ancestors known; and their doings were probably unusual enough to cause recollection of them. Here I may add, as obviously of kindred origin, the god of the Kamtschadales. Grieve tells us these people “ say that Kut, whom they sometimes call god and sometimes their first father, lived two years upon each river, and left the children that river on which they were born, for their proper inheritance.”

Such facts show us in the most general way, how the conception of a deity begins to diverge from the conception of a remarkable person, feared during his life and still more feared after his death. We will now pass to the special ways in which genesis of this conception is shown.

§ 197. If, at first, the superior and the divine are equivalent ideas, the chief or ruler will tend to become a deity

during his life and a greater deity after his death. This inference is justified by facts.

Already I have referred (§ 112) to the Maori chief who scornfully repudiated an earthly origin, and looked forward to rejoining his ancestors, the gods. It is thus elsewhere in Polynesia. "I am a god," said Tuukilakila, the chief of Somosomo. And of these Fijians, Williams says —

"Indeed, there is very little difference between a chief of high rank and one of the second order of deities. The former regards himself very much as a god, and is often spoken of as such by his people, and, on some occasions, claims for himself publicly the right of divinity." So, too, describing the sacredness of the king and queen of Tahiti, Ellis cites indirect praises of them quite as exalted as any used in worship of deities. The king's

"houses were called the aorai, the clouds of heaven, anuanua, the rainbow, was the name of the canoe in which he voyaged, his voice was called thunder, the glare of the torches in his dwelling was denominated lightning, and when the people saw them in the evening, as they passed near his abode, instead of saying the torches were burning in the palace, they would observe that the lightning was flashing in the clouds of heaven"*

The like holds in Africa. Bastian tells us that the king of Benin is not only the representative of god upon earth, but god himself; and is worshipped by his subjects in both natures. We learn from Battel that "the king of Loango is respected like a deity, being called Samba and Pongo, that is, God." According to Krapf the people of Msambara say—"We are all slaves of the Zumbe [king] who is our Mulungu [god]." About the ancient American races, we have like statements. We saw that in Peru, images of still-

* This passage from Ellis's *Polynesian Researches*, vol. iii, pp. 113, 114 (new edition), I commend to the attention of the mythologists. We are shown by it another way in which nature-worship may readily arise from ancestor-worship. As eulogies of a man after his death are apt to wax rather than wane, it is clear that this indirect glorification of a Tahitian king, surviving in legend, will yield evidence of his celestial nature, and when a king so lauded already has a complimentary name derived from anything in the heavens, these descriptions of his surroundings will join it in producing a nature-myth.

living Yncas were adored. F. de Xeres says Huayana Ccapac "was so feared and obeyed, that they almost looked upon him as their god, and his image was set up in many towns ;" while D'Acosta tells us that he "was worshipped by his people as a god during lifetime." And the statement of Garcilasso that out of various chiefs and petty kings, the good were worshipped, is confirmed by Balboa. Nor do only races of inferior type exemplify this deification of living men it occurs in races of superior type. Palgrave illustrates it among the Semites as follows :—

" 'Who is your God?' said an Arab traveller of my acquaintance to a Mesaleekh nomade, not far from Basia 'It was Fâdee,' answered the man, naming a powerful provincial governor of those lands, lately deceased, 'but since his death I really do not know who is God at the present moment' "

And that Aryans have had like conceptions, we are reminded by such facts as that Greek kings of the East, besides altars erected to them, had θεός stamped on their coins, and that Roman emperors were worshipped while alive. facts which, instead of being anomalous as is commonly supposed, show us survivals (or revivals) of practices which begin with the savage and develop with the barbarian.

Of course, as above said, identification of the superior with the divine, which leads to propitiation of living chiefs and kings as gods, leads to more marked propitiation of them after death. In Peru, according to D'Acosta, "a dead king was immediately regarded as a god, and had his sacrifices, statues, etc." Of the Yucatanese, Cogolludo, telling us that Itzamatz was a great king, says —"This king died, and they raised altars to him, and it was an oracle which gave them answers." Similarly of the Mexicans Mendieta writes :—"The people of Cholula considered Quetzalcoatl ['feathered serpent'] to be the highest god," and further "the Indians said that Quetzalcoatl, though he was a native of Tula, came from that place to people the provinces of Tlaxcala." Again, Waitz asserts "that Huitzilopochtli, ['humming-bird, left'] afterwards a su-

preme deity of the Aztecs * * * was originally a man, whose apotheosis may be clearly traced" Poly-nesia supplies kindred illustrations. In his *Hawaii*, Ellis says—"The Sandwich Islanders regarded the spirit of one of their ancient kings as a tutelar deity." Mariner tells us the Tongans believe "that there are other Hotooas, or gods, viz., the souls of all deceased nobles and matabooles, who have a like power of dispensing good and evil, but in an inferior degree." And according to Thomson, "the New Zealanders believed that several high chiefs after death became deified, and that from them all punishments in this world for evil doings were sent." In Africa it is the same. We have seen that among the Coast Negroes, king Adólee looks for success to the ghost of his dead father, and that in Dahomy the living king dutifully sacrifices victims that they may carry to the late king in the other world, reports of what has been done. that is, these dead kings have become gods Of like proofs I may add the statement of Harris, that "the king of Shoa prays at his father's shrine", and also Bastian's statement that "in Yoruba, Shango, the god of thunder, is regarded as a cruel and mighty king who was raised to heaven."

With such evidence before us, we cannot resist the implication that the apotheosis of deceased rulers among the ancient historic races, was but the continuation of a primitive practice. When, from Prof Eisenlohr, we learn that "Ramses Hek An (a name of Ramses III.) means 'engendered by Ra [Sun], prince of An (Heliopolis),' " and when, in the Harris papyrus, we find this Ramses III. saying of his father, "the gods appointed their son arising from their limbs to (be) prince of the whole land in their seat"; we cannot but recognize a more developed form of those conceptions which savage and semi-civilized exhibit all over the world. When in the Babylonian legend of the flood, we, on the one hand, meet with the statements—"the gods teared the tempest and sought refuge," "the

gods like dogs fixed in droves prostrate" (implying that the gods differed little from men in their powers and feelings); and when, on the other hand, we find that the conquering Izdubar, the hero of the legend, afterwards becomes a god, and that Bel, who made the deluge, was "the warrior Bel"; we cannot doubt that the early Babylonians, too, worshipped chiefs who, gods while alive, became greater gods after death.*

§ 198. Power displayed by the political head of a tribe, and in higher stages of progress by a king, is not the only kind of power. Hence, if at first the divine means simply the superior, men otherwise distinguished than by chieftainship, will be regarded as gods. Evidence justifies this conclusion. Sorcerers, and also persons who show unparalleled skill, are deified.

That medicine-men whose predominance has no other origin than their craft, are treated as gods during their lives, we have but little direct evidence. Sometimes, where the medicine-man is also political head, he appears to be propitiated in both capacities, as in Loango, where the king is god, and where "they believe he can give rain when he has a mind. In December the people gather to beg it of him, every one bringing his present." But we have good evidence that the medicine-man becomes a deity after death. Indeed, some facts raise the suspicion that his ghost is the one which first grows into predominance as a being to be feared. The Fuegians, to whom otherwise no definite religious ideas are ascribed, believe in "a great black man" "wandering about the woods and mountains," "who influences the weather according to men's

* The later Babylonian beliefs of this class are implied by the following passage from Méнант's translation of the great inscription of Nabuchadnezzar —

"Je suis Nabu-kudur-usur le fils aîné de Nabu-pal-usur roi de Babylou, Moi!" "Le dieu Bel, lui-même, m'a créé, le dieu Marduk qui m'a engendré, a déposé lui-même le germe de ma vie dans le sein de ma mère."

conduct". evidently a deceased weather-doctor. So, too, of the neighbouring Patagonians, Falkner tells us that their wandering demons are "the souls of their wizards." Much more specific is Schoolcraft's statement concerning the Chippewas. Mana Bosho, one of their gods, is represented as having recourse to his magic drum and rattles "to raise up supernatural powers to help him" he uses in the other world those appliances which, as a sorcerer, he used in this. Again, Bancroft tells us that the Cahrocs have "some conception of a great deity called Chareya, the Old Man Above. * * * he is described as wearing a close tunic, with a medicine-bag." In Africa the Damaras furnish a definite instance Galton says—"We passed the grave of the god Omakurn; the Damaras all threw stones on the cairn, exclaiming, 'Father Omakurn.' He gives and withholds rain." The apotheosis of the medicine-man in Polynesia, is shown us by Ellis's statement that "the Sandwich Islanders have a tradition that a certain man, whom they deified after his death, obtained all their medicinal herbs from the gods. To this man the doctors address their prayers" That in ancient Mexico the power shown by the sorcerer led to deification of him, is inferable from the following statement of Mendieta—"Others said that only such men had been taken for gods who transformed themselves or * * * appeared in some other shape, and in it spoke or did something beyond human power." But the best examples (unless we regard the stories gathered together in the *Heims-kringla* as mere inventions) are furnished by our own Scandinavian ancestors. As described in that work, chaps. 4—10, Odin was manifestly a medicine-man. We read that "when Odin of Asaland came to the north, and the gods with him," he "was the cleverest of them all, and from him all the others learned their magic arts." We read further that when the Vanaland people beheaded Memir, a man of great understanding, "Odin took the head, smeared it with herbs so that it should not rot, and

sang incantations over it. Thereby he gave it the power that it spoke to him, and discovered to him many secrets."

"Odin died in his bed in Sweden, and when he was near his death he made himself be marked with the point of a spear, and said he was going to Godheim, and would give a welcome there to all his friends, and the Swedes believed that he was gone to the ancient Asgard, and would live there eternally. Then began the belief in Odin and the calling upon him * * . Odin was burnt, and at his pile there was great splendour."

In chapter xi. of the same work, Niort is described as continuing the sacrifices after Odin, and the Swedes believed he "ruled over the growth of seasons."

"In his time all the diars or gods died, and blood-sacrifices were made for them. Niort died on the bed of sickness, and before he died made himself be marked for Odin with the spear-point."

"Frey took the kingdom after Niort, * * * there were good seasons in all the land, which the Swedes ascribed to Frey, so that he was much more worshipped than the other gods. -- * * Now when Frey died they bore him secretly into the mound, but told the Swedes he was alive, and they kept watch over him for three years. They brought all the taxes into the mound. * * Peace and good seasons continued."

In these extracts there are various instructive implications. The dominant race, coming from the East, returned there at death. While living they were worshipped, as we see superior men are, and have been, elsewhere. Such among them as were accounted powerful magicians, were more especially worshipped. After death these gained the character of great gods in virtue of their repute as great medicine-men; and were propitiated for a continuance of their supernatural aid. Of course, with the mythologists these circumstantial stories of the lives, deaths, and funeral rites of reputed magicians, go for nothing. They think them products of the mythopœic tendency, and are not astonished at the correspondence between alleged fictions and the facts which existing savages show us. I suppose they are prepared similarly to dispose of such statements as that the descendants of Æsculapius worshipped him as a god, and counted the links of descent

from him. Here, however, in presence of proofs that even now, in both hemispheres, weather-doctors and medicine-men become gods, we shall conclude that these legends had their roots in realities.

Between the medicine-man and the teacher of new arts, there is but a nominal distinction; for, as we have seen, the primitive man thinks that any ability beyond the ordinary is supernatural even the blacksmith is a kind of magician to the African. Hence we may be prepared to find deifications of men whose superiority was shown by their greater knowledge or skill, and we find them in many places. Waitz says the Brazilians "ascribe the origin of agriculture to their teacher Tupan, who seems to be identical with the founder * * * of the race, and with the Supreme Being, so far as they have any idea of such." According to Bancroft, the Chinooks say that "a kind and powerful spirit called Ikánam, * * * taught them how to make canoes as well as all other implements and utensils; and he threw great rocks into the rivers and made falls, to obstruct the salmon in their ascent, so that they might be easily caught." The Mexican god "Quetzalcoatl was a divinity who, during his residence on earth, instructed the natives in the use of metals, in agriculture, and in the arts of government." Further, the Mexicans apotheosized Chicomecoatl as the first woman who made bread, Tzaputlatena as the inventress of the uxtl-oil; Opuchtl as the inventor of some fishing implements; Yiacatecutli as the originator of trade; and Napatecutli as the inventor of rush mats. The Central Americans, too, had their gods and goddesses Chac, Ixazalvoh, Itzamná, Ixchebelyax, who were the inventors of agriculture, of cotton-weaving, of letters, of painting, as Cogoludo tells us. In the earliest records of historic peoples we meet with like facts. The Egyptian gods, Osiris, Ombte, Neph, and Thoth are said to have taught them arts, and the Babylonian god Oannes is similarly represented as having been an instructor. And it is needless to enumerate the

Greek and Roman deities described as teachers of one or other new process, or inventors of this or that new appliance.

Still, then, we have the same truth under another aspect. Power exceeding previously-known powers, excites awe; and the possessor of it, feared during his life, is still more feared after his death.

§ 199. Unawares in treating of those who, within the tribe, as medicine-men or men of unusual ability, have acquired repute leading to deification, I have entered on the next class of facts—facts showing us that the foreign member of a superior race, becoming naturalized, becomes a god among an inferior race.

In our own times, members of our own race, such as shipwrecked sailors, escaped convicts, etc., thrown among savage peoples, gain ascendancy over them by virtue of the knowledge and skill they display, and when we remember that after the deaths of such men, their powers, exalted in legend, are sure to make their ghosts feared more than ordinary ghosts, we shall recognize another source from which deities arise. That men of low type even now class strangers of high type as gods, we have abundant proof. In Africa, as we are told by Chapman, the Bushmen say—"Those white men are children of God; they know everything." Livingstone describes the East Africans as exclaiming to Europeans—"Truly ye are gods"; while Tuckey and Bastian state that the whites are thus spoken of in Congo. A chief on the Niger, seeing whites for the first time, thought them "children of heaven." When Thompson and Moffatt wished to see a religious ceremony peculiar to the Bechuana women, the women said—"These are gods, let them walk in." Even among so superior an African race as the Fulahs, some villagers, says Barth, "went so far as to do me the honour of identifying me with their god 'Fete,' who, they thought, might have come to spend a day with them" (staying to dinner, like Zeus with the Ethiopians). Other races furnish

kindred instances. The Khond women said of Campbell's tent, "It is the house of a god." Barbe states that the "Nicobarians have such a high idea of the power of Europeans, that to them they attribute the creation of their islands, and they think it depends on them to give fine weather."* Remarking of the Fijians that "there appears to be no certain line of demarcation between gods and living men," Erskine tells us that one of the chiefs said to Mr. Hunt—"If you die first, I shall make you my god" Mr. Alfred Wallace, who has had extensive opportunities of studying primitive men, says of the Aru Islanders—

"I have no doubt that to the next generation, or even before, I myself shall be transformed into a magician or a demi-god, a worker of miracles, and a being of supernatural knowledge. They already believe that all the animals I preserve will come to life again, and to their children it will be related that they actually did so. An unusual spell of fine weather setting in just at my arrival, has made them believe I can control the seasons."

And then, lastly, we have the fact that an apotheosis like that which Mr. Wallace anticipates, has already occurred in a neighbouring island. Low, in his *Sarawak*, says the Dyaks attribute supernatural power to Rajah Brooke. He is invoked along with the other gods.

With such abundant proofs that the genesis of gods out of superior strangers is now going on, we cannot, without perversity, regard as fictions those stories found in many countries, which represent certain gods as having brought knowledge and arts from elsewhere. Mendieta says the Mexican chief god, Quetzalcoatl, who came from the west, was "a tall white man, with broad forehead, large eyes, long black hair, and great round beard," who, having instructed them and reformed their manners, departed by the way he came. So, too, of the great god of the Chibchas, Bochica, we read that he was a white man with a beard, who gave them laws

* I have lately had brought to me from the locality, a photograph of Nicobar-idols, among which there are grotesque and yet characteristic figures of Englishmen.

and institutions, and who disappeared after having long lived at Sogamoso. In South America it is the same. Humboldt tells us that "Amalivaca, the father of the Tamanacs, that is, the creator of the human race (for every nation regards itself as the root of all other nations) arrived in a bark." He afterwards re-embarked "Amalivaca was a stranger, like Manco-Capac, Bochica, and Quetzalcohuatl"

In some cases the remarkable strangers who thus become a people's gods, are regarded as the returned ghosts of their own remarkable men. Ghosts and gods being originally undifferentiated in thought; and neither of them being always distinguishable from living persons; it happens, as was shown in § 92, that the whites are, by Australians, Polynesians, and Africans, held to be the doubles of their own dead. When we read that among the Wanikas "'Mulunga,' the word applied like the Kaffir 'Uhlunga' to the Supreme, also denotes any good or evil *revenant*;" we see how it happens that Europeans are called indiscriminately ghosts and gods. Hence the naturalness of the fact which Ellis tells us of the Sandwich Islanders, that when "Captain Cook arrived, it was supposed, and reported, that the god Rono was returned", and therefore "the people prostrated themselves before him." Hence, too, the belief implied by Camargo's account of the Mexicans, that "as soon as the Spaniards had disembarked, news came to the very smallest villages that the gods had arrived" the expectation being "that their god Quetzalcoatl had come" back with his companions. And hence, again, the explanation of Piedrahita's statement respecting the Chibchas, that at Turmequé they "showed to the Spaniards the veneration and worship they showed to the gods, making incense to them."

Thus we find re-illustrated under other conditions, the same general truth, that the primitive god is the superior man, either indigenous or foreign; propitiated during his life and still more after his death.

§ 200. From this deification of single men of higher races, there is a natural transition to the deification of conquering races, not individually but bodily. The expression "gods and men," occurring in the traditions of various peoples, is made readily interpretable.

We assume that, as a matter of course, every tribe of savages has a word for man, applicable equally to members of their own tribe and to members of other tribes; but, as usual, we are misled by assimilating their thoughts and language to ours. Often their name for men is their tribal name. Already we have seen that among the Guarames of South America, the same word means man and Guarani. In North America, too, the people who call themselves *Thlnkeets* have no word but this to signify human beings; and an adjacent race, the *Tinneh*, furnish a parallel case. Similarly in Africa, the native name for the Kaffir tribes is *Abantu*, *Bantu* (plural of *ntu*, a man;) and for the *Hottentot* tribes the designation is *Koi-kou* (i.e., "men of men," from *koi*, a man). In Asia, again, Mason says of the Karens that "a few of the tribes only have distinctive names for themselves, and all, when speaking of each other, use the word for man to designate themselves;" and according to Kotzebue, the Kamtschadales "have no designation either for themselves or their country. They called themselves simply men, as considering themselves either the only inhabitants of the earth, or so far surpassing all others as to be alone worthy of this title." Indeed, in his *Stone Age*, Nilsson, generalizing such facts, says that "all rude nations apply the designation 'men' to themselves only, all others being differently designated."

And now let us ask what will happen when savages who call themselves men, are conquered by savages otherwise called, but proved by the conquest to have that superiority which in the primitive mind is equivalent to divinity? Clearly, the names of the conquering and conquered will become equivalent in their meanings to "gods and

men " In some cases, indeed, the name by which the conquerors call themselves will necessitate this. Southey tells us of the Tupis that "Tupa is their word for father, for the Supreme Being, and for thunder, it passed by an easy process from the first of these meanings to the last, and the barbarous vanity of some tribes compounded from it a name for themselves." So that if these children of Tupa, which means "children of God," subjugate a people whose name is equivalent to "men," the distinction of the two as "gods and men" becomes inevitable.

With such evidence before us, what shall we think about the "gods and men" that figure in the legends of higher races? On reading in Nilsson's *Stone Age* that in Scandinavia there are distinct traces of the antagonism of aboriginal races to colonists, as early as the stone and bronze periods; and on then reading in Scandinavian traditions about Odin, Frey, Niort, and the rest, coming from Godheim (god's-home or land) to Menheim (men's-home or land); ruling there and being worshipped, dying there believing that they were going back to Godheim, just as all primitive races believe that they return after death to fatherland; we shall conclude that these "gods and men" were simply conquering and conquered races all mythological interpretations notwithstanding. When we find that, as given by Pausanias, a popular legend among the Greeks was that the ancient Arcadians "were guests and table-companions of the gods"; we shall not set this down as a pure fiction devised after the gods had been created by personalizing the powers of nature, but shall infer that the tradition had its root in those conquests of earlier races by later implied in Hesiod—conquests such as must certainly have been going on, and must certainly have left exaggerated narratives. So, too, with "the sons of god and the daughters of men" in the Hebrew story. When we remember the reprobation that has everywhere been visited on the intermarriage of a conquering caste and a subject

caste—when we remember that in Greek belief it was a transgression for the race of gods to fall in love with the race of men—when we remember that in our own feudal times union of nobles with serfs was a crime; we shall have little difficulty in seeing how there originated the story of the fall of the angels.

Any one who, after considering this evidence, remembers that from the names and natures ascribed by existing savage peoples to Europeans, legends of “gods and men” are even now arising, will, I think, scarcely hesitate. Remaining doubt will be further diminished by reading the legend of the Quichés, which gives, with sufficient clearness, the story of an invading race who, seizing an elevated region, and holding in terror the natives of the lower lands, became the deities of the surrounding country, and their mountain residence the local Olympus. (See Appendix.)

§ 201. This brings us once more to the Aryan gods, as seen from another point of view. That we may judge which hypothesis best fits the facts, let us first observe how the early Greeks actually conceived their gods, ignoring wholly the question how they got their conceptions. And let us compare their pantheon with the pantheon of another race—say that of the Fijians

The Greek god is everywhere presented to us under the guise of a powerful man, as is the Fijian. Among the Fijians, gods “sometimes assume the human form, and are thus seen by men”; and how common was a like theophany among the Greeks, the *Iliad* shows us page after page. So like a man was the Greek god, that special insight, supernaturally given, was required to distinguish him; and, as we have seen, it is difficult to find what is the difference between a god and a chief among the Fijians. In the Fijian pantheon there are grades and divided functions—a chief god, mediating gods, gods over different things and places. thus paralleling the Greek pantheon, which was a hierarchy

with a distribution of ranks and duties. Fijian deities may be classed into gods proper and deified mortals—some whose apotheosis has dropped out of memory and some whose apotheosis is remembered; and there were apotheosized mortals, too, among the Greek deities. A descriptive title of one of the Fijian gods is “the Adulterer”—a title applicable to sundry Greek gods. Another name is “the Woman-stealer”—a name not undeserved by Zeus. Yet a further sobriquet borne by a Fijian god is “Fresh-from-slaughter”, which would answer for Ares, who is called “the Blood-stainer”. The Fijian gods love and hate, are proud and revengeful, and make war, and kill and eat one another; and if we include the earlier generations of Greek gods, kindred atrocities are told of them. Though cannibalism is not a characteristic, still Poseidon loves his cannibal son Polyphemus; and though fighting among them does not remain conspicuous, still there is the conspiracy from which Zeus was saved by Thetis; and there is perpetual squabbling and vituperation. even Zeus being vilified by his daughter Athene, as well as by the divine shrew Here. The Fijian gods play one another tricks, as did also the gods of the Greeks. Sometimes the Fijians “get angry with their deities and abuse and even challenge them to fight”; and among the Greeks, too, there was abuse of the gods even to their faces, as of Aphrodite by Helen, and if there was not challenging to fight, still there was fighting with, and even victory over, gods, as of Diomedes over Ares, and there was threatening of gods, as when Laomedon refusing to pay Poseidon his wages, said he would cut off his ears. The Fijians have a story of gods who tumbled out of a canoe, and, being picked up by a woman, were taken to a chief’s house to dry themselves—a story against which we may set that of Dionysus, who, frightened by the Thracian Lycurgus, took refuge in the sea, and who when seized by pirates was carried bound on board their vessel. Though Dionysus unbound himself, we are reminded that in

other cases gods remained subject to men ; as was Proteus, and as was even Ares, when Otus and Ephialtes kept him in prison thirteen months, and as was Apollo when a slave to Laomedon. Thus, however material and human are the Fijian gods, living, eating, acting as men do ; the gods of the Greeks are represented as no less material and human. They talk, and banquet, and drink, and amuse themselves during the day, and go to bed at sunset. "the Olympian thunderer, Zeus, went to his couch" and slept. They are pierced by men's weapons. Ares' wound is healed by a "pain-assuaging plaster", and Aphrodite, after some loss of blood and being distracted with pain, borrows her brother's chariot and drives off to Olympus to be similarly doctored. All their attributes and acts are in keeping with this conception. In battle Here simulates Stentor in appearance and voice ; Apollo shouts from Pergamus to exhort the Trojans ; Iris comes "running down from Olympus", and the celestial chariots, made in earthly fashion of earthly materials, are drawn by steeds that are lashed and goaded, through the gates of Heaven which creak. The single fact that Zeus is on visiting terms with "the milk-fed men of Thrace," suffices of itself to show how little the divine was distinguished from the human ; and how essentially parallel were the Greek conceptions to the conceptions which the Fijians now show us.

Here, then, is the question. Similar as these conceptions are, were they similarly generated ? Beyond all doubt the Fijian pantheon has arisen by that apotheosis of men which was still going on when travellers went among them ; and if we say that by the Greeks, who also apotheosized men, a pantheon was generated in like manner, the interpretation is consistent. We are forbidden to suppose this, however. These Greek gods, with their human structures, dispositions, acts, histories, resulted from the personalization of natural objects and powers. So that, marvellous to relate, identical conceptions have been produced by diametrically opposite

processes ! Here we see an ascending growth of men into gods, there we see a descending condensation of natural powers into gods ; and the two sets of gods, created by these two contrary methods, are substantially the same !

Even in the absence of all the foregoing chapters, those who are not wedded to an hypothesis will, I think, say that evidence widely different in amount and quality from that which the mythologists offer, is required to demonstrate so astonishing a coincidence.

§ 202. Must we recognize a single exception to the general truth thus far verified everywhere ? While among all races in all regions, from the earliest times down to the present, the conceptions of deities have been naturally evolved in the way shown ; must we conclude that a small clan of the Semitic race had given to it supernaturally, a conception which, though superficially like the rest, was in substance absolutely unlike them ?

Education, the social sanction, and an authority made overwhelming by antiquity, numbers, and imposing credentials, lead nearly all to assume that the genesis of their own idea of deity differs fundamentally from the genesis of every other idea. So unhesitatingly, indeed, do they assume this, that they think it impious to ask whether any parallelism exists. In the case of another creed they can see the mischief that arises from refusal to examine. From the warning of Euripides that "in things which touch the gods it is not good to suffer captious reason to intrude," they will readily draw the moral that, in this case, a faith profound enough to negative criticism, fosters superstition. Still more on finding that the cannibal Fijians, accepting humbly the established dogmas respecting their blood-thirsty deities, assert that "punishment is sure to overtake the sceptic", they will see clearly enough, in another case, how vile may be the superstition which defends itself by interdicting inquiry. But, looking at the outsides of other creeds,

antagonistically, and at their own creed from within, sympathetically, they cannot think it possible that in their case a kindred mischief may result from a kindred cause. On reading that when the Spaniards arrived in Mexico, the natives, thinking them gods, offered up human beings to them, it is allowable to ask whether the ideas and motives of these people were analogous to those of the Scandinavian king On, when he immolated his son to Odín; but it is not allowable to ask whether like ideas and motives prompted Abraham's intention to sacrifice Isaac. The above-cited fact that Dr. Barth was taken by the Fulahs for their god, Fete, may properly raise the question whether, if there had arisen a quarrel between his party and the Fulahs in which he was worsted by one of their chiefs, there might not have grown up a legend akin to that which tells how the god Ares was worsted by Diomedes, but it is highly improper to raise the question whether the story of Jacob's prolonged struggle with the Lord had an origin of allied kind. Here, however, pursuing the methods of science, and disregarding foregone conclusions, we must deal with the Hebrew conception in the same manner as with all others; and must ask whether it had not a kindred genesis.

What was really the primitive Semitic notion of a deity, we may prepare ourselves for seeing by contemplating the notion of a deity which is entertained by wandering Semites at the present time. Already I have quoted from Mr. Palgrave one illustration of it, and here is another.

" 'What will you do on coming into God's presence for judgment after so graceless a life?' said I one day to a spirited young Sheravat * * * 'What will we do?' was his unhesitating answer, 'why, we will go up to God and salute him, and if he proves hospitable (gives us meat and tobacco), we will stay with him, if otherwise, we will mount our horses and ride off' * * * Were I not afraid of an indictment for profaneness, I might relate fifty similar anecdotes at least "

Clearly, then, the existing Semitic idea of deity, is no higher than that which other races have shown us, and

the question is, whether the ancient Semites had an idea not only absolutely unlike that of all other races but absolutely unlike that of their modern kindred.

To find a clear and consistent answer in traditions put on record by different writers at different dates—traditions with which are incorporated stories and conceptions derived from adjacent more civilized peoples, is of course difficult. The difficulty necessarily existing, is increased by the established habit of carrying back developed ideas to the interpretation of early statements, as by commentators who explain away certain highly concrete descriptions of divine actions as “natural anthropomorphic language suited to the teaching of man in a state of simple and partial civilization” If, however, we reject all non-natural interpretations; and, taking the narrative literally, infer, as analogy warrants, that the most crudely anthropomorphic descriptions are the original ones, we shall find the difficulty less.

Abraham is described as doing that which primitive men, and especially nomads, are continually compelled to do by increase of numbers—leaving his kindred and migrating to a new dwelling-place separating, as he afterwards separated from Lot, to get pasturage. That he thinks himself supernaturally prompted, apparently by a vision, reminds us of the domgs of the uncivilized at large, who habitually look for such signs. The new territory to which he migrates, the story represents as made over to him; and the question is—Was Abraham dealing with a terrestrial potentate, or with the Power by which planets gravitate and stars shine?

The words applied to this giver of the territory are expressive simply of superiority. *Elohim*, in some cases translated gods, is applied also to powerful persons, kings, judges, and to other things great or high. So, too, *Adonai* is indiscriminately used, (as “Lord” is among ourselves) to a being regarded as supernatural and also to a living man. Kuenen gives as the meaning of *Shaddai*, “‘the mighty one,’

or perhaps still more exactly, 'the violent one' ". a title harmonizing with those of Assyrian kings, who delight in comparing themselves to whirlwinds and floods. Even the more exalted titles find their parallels in those of neighbouring rulers. When, in the cuneiform inscriptions, we find Tiglath-pileser, called "king of kings, lord of lords," we see that there is nothing exceptional in the title "god of gods, and lord of lords, a great god, a mighty and terrible": a description which implies that the Hebrew god is one of many, distinguished by a supremacy.

By this being who bears titles such as are borne by terrestrial potentates, Abraham is promised certain benefits to be given in return for homage. And when he complains, fearing that the promise would not be fulfilled, he is pacified by renewed promises. Finally, a definite covenant is made—an agreement by which Abraham is to have "all the land of Canaan," while the giver is "to be a god unto" him. The supposition that such an agreement was entered into between the First Cause of things and a shepherd chief, would be an astounding one were it admissible, but it is excluded by the words used the very expression "a god" clearly negatives the conception on either side of a supreme universal power. If, however, instead of supposing that "a god" is here used to mean a supernatural being, we suppose that it is used, as by the existing Arab, to mean a powerful ruler, the statement becomes consistent

Still more clearly have we the same implications in the ceremony by which the covenant is established. Abraham, and each of his male descendants, and each of his male slaves, is circumcised. The mark of the covenant, observe, is to be borne not only by Abraham and those of his blood, but also by those of other blood whom he has bought. The mark is a strange one, and the extension of it is a strange one, if we assume it to be imposed by the Creator of the Universe, as a mark on a favoured man and his descendants; and on this assumption it is no less strange that the one

transgression for which every "soul shall be cut off" is not any crime but the neglect of this rite. But such a ceremony insisted on by a living potentate under penalty of death, is not strange; for, as we shall hereafter see, circumcision is one of various mutilations, imposed as marks on subject persons by terrestrial superiors.

And now, passing from collateral to direct evidence, observe the idea which Abraham is himself represented as forming of this being with whom he has covenanted. While he sat at his tent door "three men stood before him". nothing implies that they were unlike other men or much unlike one another. He "bowed himself toward the ground," and addressed one of them "my lord." Asking them to rest and to wash their feet, he invited them to "comfort ye your hearts with a morsel of bread." So that, regarding them as tired, travel-stained, and hungry travellers, Abraham treats these "three men" according to those rites of hospitality still observed by the Arabs. There is no indication that Abraham suspects supernaturalness in any of the three; nor, when Sarah laughs at the promise that she shall have a son, does it seem that she, either, imagines she is in the presence of anything more than a human being. It is true that Abraham, addressing this visitor with the title given to superior persons, believes him able to do things we class as supernatural—ascribes to him the character common to primitive potentates, who are very generally magicians as well as rulers—ascribes to him powers such as are ascribed by savages to Europeans at the present time. But though, while showing him the road to Sodom, Abraham talks in a way implying this belief, he implies no more. The question, mark, is not that which theologians raise—Who actually were these "three men"? was the chief of them Jehovah? or his angel? or the Son? The question is what Abraham thought, or is described as thinking by those who preserved the tradition. Either alternative has the same ultimate implication. If this person to whom Abraham

salaams as his lord, with whom he has made the covenant, is a terrestrial ruler, as implied by the indirect evidence, the conclusion is reached that the ancient Semitic idea of a deity was like the modern Semitic idea cited above. And if, otherwise, Abraham conceives this person not as a local ruler but as the Maker of All Things, then he believes the Earth and the Heavens are produced by one who eats and drinks and feels weary after walking—his conception of a deity still remains identical with that of his modern representative, and with that of the uncivilized in general.

§ 203. And so the universality of anthropomorphism has the sufficient cause that the divine man as *conceived*, had everywhere for antecedent a powerful man as *perceived*. The abundant evidence given that the primitive mind frames the notion in this way, may be enforced by facts showing that it fails to frame any other notion.

When Burton, encamped among the Eesa, heard an old woman with the toothache exclaiming, "O Allah, may thy teeth ache like mine"—when he further tells us that the wilder Bedouins will ask where Allah is to be found that they may spear him, "because he lays waste their homes and kills their cattle"—when, according to Moffat, the Hottentots, notwithstanding missionary instruction, regard the Christian god as "a notable warrior of great physical strength"—when, as Hunter narrates, a Santal, responding to a missionary's account of God's omnipotence, said, "and what if that strong one should eat me;" we are taught that not only does the undeveloped mind conceive God as a powerful man, but that it is incapable of any higher conception.

A like implication everywhere meets us in the aboriginal belief that gods are mortal. In a Quiché legend, given by Bancroft, we read "so they died like gods, and each left to the sad and wondering men who were his servants, his garments for a memorial." The writers of the Vedic hymns,

says Muir, "looked upon the gods" as "confessedly mere created beings," and they, like men, were made immortal by drinking soma. In the legend of Buddha it is stated that the prince, inquiring about a corpse, was told by his guide—"This is the final destiny of all flesh: gods and men, rich and poor, alike must die." We saw that the Scandinavian gods died and were burnt—returning thereafter to Asgard. So, too, the Egyptian gods lived and died. there are frescos at Philæ showing the burial of Osiris. And though in the Greek pantheon, the death of gods is exemplified only in the case of Pan, yet their original mortality is implied by the legends, for how could Apollo have been a slave to Laomedon, if he then had that power of assuming and throwing-off the material form at will, which is possessed in common by the Greek god and the primitive ghost?

How deeply rooted are these ideas of deities, is further shown by the slowness with which culture has changed them. Down to civilized times the Greeks thought of their gods as material persons. about 550 B.C. they believed in a living woman palmed upon them as Athene, and in 490 B.C. to Phidippides on his way from Athens to Sparta, Pan, meeting him, complains of neglect. Mahomet had to forbid the adoration which certain of his followers offered him, and about A.D. 1000 the Caliph Hakem was worshipped while living, and is still worshipped by the Druses. Paul and Barnabas were treated as gods by the priest and people of Lystra. And the sculpture, painting, and literature of mediæval Europe, show how grossly anthropomorphic was the conception of deity which prevailed down to recent centuries. Only alluding to the familiar evidence furnished by the mystery-plays, it will suffice if I instance the Provençal verses which describe God's illness as cured by laughter at a dancing rhyme (see Appendix). Nor, indeed, among some Catholic peoples are things much better now. Just as the existing

savage beats his idol if his hopes are not fulfilled—just as the ancient Arcadian was apt “to scourge and prick Pan if he came back empty-handed from the chase”; so, an Italian peasant or artizan will occasionally vent his anger by thrashing a statue of the Madonna: as at Milan in Sept., 1873, and as at Rome not long before. Instead of its being true that ideas of deity such as are entertained by cultivated people, are innate; it is, contrariwise, true that they arise only at a comparatively advanced stage, as results of accumulated knowledge, greater intellectual grasp, and higher sentiment.

§ 204. Behind the supernatural being of this order, as behind supernatural beings of all other orders, we thus find that there has in every case been a human personality.

Anything which transcends the ordinary, a savage thinks of as supernatural or divine the remarkable man among the rest. This remarkable man may be simply the remotest ancestor remembered as the founder of the tribe, he may be a chief famed for strength and bravery; he may be a medicine-man of great repute, he may be an inventor of something new; and then, instead of being a member of the tribe, he may be a superior stranger bringing arts and knowledge; or he may be one of a superior race gaining predominance by conquest. Being at first one or other of these, regarded with awe during his life, he is regarded with increased awe after his death; and the propitiation of his ghost, becoming greater than the propitiation of ghosts which are less feared, develops into an established worship.

There is no exception then. Using the phrase ancestor-worship in its broadest sense as comprehending all worship of the dead, be they of the same blood or not, we reach the conclusion that ancestor-worship is the root of every religion.*

* Some additional facts and arguments, bearing directly and indirectly on this conclusion, will be found in the Appendix.

CHAPTER XXVI.

THE PRIMITIVE THEORY OF THINGS.

§ 205. THAT seeming chaos of puerile suppositions and monstrous inferences making up the vast mass of superstitious beliefs everywhere existing, thus takes an orderly form when, instead of looking back upon it from our advanced stand-point, we look forward upon it from the stand-point of the primitive man

The interpreters of early conceptions err in the same way as do most teachers of the young. Never having studied Psychology, the pedagogue has but the dimmest notion of his pupil's mind, and, thinking of the undeveloped intellect as though it had conceptions which only the developed intellect can have, he presents it with utterly incomprehensible facts—generalizations before there exist in it the things to be generalized, and abstractions while there are none of the concrete experiences from which such abstractions are derived, so causing bewilderment and an appearance of stupidity. Similarly, narrators of primitive legends and speculators about the superstitions of savages, carry with them the ideas and sentiments generated by civilization, and, crediting the savage with these, either express an unreasoning wonder that he should think as he does, or else, seeking to explain his thoughts, give explanations which ascribe to him conceptions he cannot have.

When, however, we cease to figure his mental processes

in terms of our own, the confusion disappears. When, verifying *à priori* inference by *à posteriori* proof, we recognize the fact that the primitive man has no such ideas as natural and unnatural, possible and impossible,—no such ideas as law, order, cause, etc., and that while he shows neither rational surprise nor the curiosity which prompts examination, he lacks fit words for carrying on inquiry, as well as the requisite power of continued thinking, we see that instead of being a speculator and maker of explanations, he is at first an almost passive recipient of conclusions forced on him. And on asking what these are, we see that he is inevitably betrayed into an initial error, and that this inevitably originates an erroneous system of thought which elaborates as he advances.

How natural is the evolution of this system of thought, we shall perceive on now recapitulating, in the briefest way, the results reached in the foregoing eighteen chapters.

§ 206. Changes in the sky and on the earth, hourly, daily, and at shorter or longer intervals, go on in ways about which the savage knows nothing—unexpected appearances and disappearances, transmutations, metamorphoses. These, while seeming to show that arbitrariness characterizes all actions around, foster the notion of a duality in the things which become visible and vanish, or which transform themselves; and this notion is confirmed by experiences of shadows, reflections, and echoes.

The impressions thus produced by converse with external nature, favour a belief set up by a more definite and familiar experience—the experience of dreams. Having no conception of mind, the primitive man regards a dream as a series of actual adventures—he did the things, went to the places, saw the persons, dreamt of. Untroubled by incongruities, he accepts the facts as they stand; and, in proportion as he thinks about the matter, he is led to conceive a double which goes away during sleep and comes back.

This conception of his own duality, seems confirmed by the facts of somnambulism.

Still more decisively does it seem confirmed by the occurrence of certain other abnormal insensibilities. In swoon, apoplexy, catalepsy, and the unconsciousness following violence, it appears that the other-self, instead of returning at call, will not return for periods varying from some minutes to some days. Occasionally after one of these states, the other-self gives an account of what has happened in the interval; occasionally no such account of its adventures can be got; and occasionally prolonged absence raises the doubt whether it has not gone away for an indefinite period.

The distinction between these conditions of temporary insensibility and the condition of permanent insensibility, is one which, sometimes imperceptible to the instructed, cannot be recognized by the savage. The normal unconsciousness of sleep from which the other-self is readily brought back, is linked by these abnormal kinds of unconsciousness from which the other-self is brought back with difficulty, to that permanent kind of unconsciousness from which the other-self cannot be brought back at all. Still, analogy leads the savage to infer that it will eventually come back. And here, recalling the remark often made among ourselves after a death, that it is difficult to believe the deceased, lying not more quietly than he has often done, will never move again, let me point out how powerful over the primitive mind must be the association between this sleep-like quiescence and the waking that habitually follows—an association which, even alone, must go far towards suggesting resurrection. Such resurrection, shown by the universal fear of the dead to be vaguely imagined even by the lowest races, becomes clearly imagined in proportion as the idea of a wandering duplicate is made definite by the dream-theory.

The second-self ascribed to each man, at first differs in nothing from its original. It is figured as equally visible,

equally material; and no less suffers hunger, thirst, fatigue, pain. Indistinguishable from the person himself, capable of being slain, drowned, or otherwise destroyed a second time, the original ghost, soul, or spirit, differentiates slowly in supposed nature. Aiming to reconcile conclusions, progressing thought ascribes a less and less gross materiality; and while the ghost, having at the outset but a temporary second life, gradually acquires a permanent one, it deviates more and more in substance from body: becoming at length etherealized.

This double of the dead man, originally conceived as like him in all other respects, is conceived as pursuing like occupations after going away at death. If of predatory race, it fights and hunts as before, if of pastoral, it continues to look after cattle, and drink milk, if of agricultural, it resumes the business of sowing, reaping, etc. And from this belief in a second life which is also like the first in form of government and social arrangements, there result the practices of leaving with the corpse food, drink, clothes, weapons, and of sacrificing at the grave domestic animals, wives, slaves.

The place in which this life after death is believed to be passed, varies with the antecedents of the race. Often the ghosts are thought of as mingling with their descendants, and portions of meals are daily set aside for them; sometimes the adjacent forests are their imagined haunts, and they are supposed to consume the offerings of food left there, while in other cases the idea is that they have gone back to the region whence the race came. This other-world is reached by a journey over land, or down a river, or across the sea, towards this or that point of the compass, according as the traditions determine. Hence at the grave there are left fit appliances for the journey—canoes for the voyage, or horses to ride, dogs to guide, weapons for defence, money and passports for security. And where burial on a mountain range entails belief in this as a residence of

ancestral ghosts, or where such range has been held by a conquering race, the heavens, supposed to be accessible from the mountains, come to be regarded as the other-world, or rather as one of the other-worlds.

The doubles of dead men, at first assumed to have but temporary second lives, do not, in that case, tend to form in popular belief an accumulating host, but they necessarily tend to form such a host when permanent second lives are ascribed to them. Swarming everywhere, capable of appearing and disappearing at will, and working in ways that cannot be foreseen, they are thought of as the causes of all things which are strange, unexpected, inexplicable. Every deviation from the ordinary is ascribed to their agency, and their agency is alleged even where what we call natural causation seems obvious.

Regarded as workers of all remarkable occurrences in the surrounding world, they are regarded as workers also of unusual actions in living persons. The body, deserted by its other-self during insensibility, normal or abnormal, can then be entered by the other-self of some one else, living or dead, and hence to the malicious doubles of dead men are ascribed epilepsy and convulsions, delirium and insanity. Moreover, this theory of possession, accounting for all those bodily actions which the individual does not will, makes comprehensible such acts as sneezing, yawning, etc., and is extended to diseases at large and to death; which is habitually attributed to an invisible enemy.

While the entrance of friendly spirits into men, giving supernatural strength or knowledge, is desired and prayed for, this entrance of spirits which inflict evils, physical and mental, is of course dreaded, and when it is believed to have occurred, expulsion is the only remedy. The exorcist, by loud noises, frightful grimaces, abominable stench, etc., professes to drive out the malicious intruder. And this simpler form of exorcism is followed by the developed form in which a more powerful spirit is called in to help.

Whence, also, there eventually grow up the practices of the sorcerer; who, using means to coerce the souls of the dead, commissions them to work his evil ends.

But while primitive men, regarding themselves as at the mercy of surrounding ghosts, try to defend themselves by the aid of the exorcist and the sorcerer, who deal with ghosts antagonistically, there is simultaneously adopted a contrary behaviour towards ghosts—a propitiation of them. Two opposite ways of treating the corpse show us the divergence of these two opposite policies. In some cases the avowed aim is that of preventing revival of the deceased, so that he may not trouble the living—a kind of motive which, where he is supposed to have revived, prompts antagonistic dealings. But in most cases the avowed aim is that of securing the welfare of the deceased on resuscitation—a kind of motive which prompts subsequent propitiatory observances.

Out of this motive and these observances come all forms of worship. The awe of the ghost makes sacred the sheltering place of the tomb, and this grows into the temple, while the tomb itself becomes the altar. From provisions placed for the dead, now habitually and now at fixed intervals, arise religious oblations, ordinary and extraordinary—daily and at festivals. Immolations and mutilations at the grave, pass into sacrifices and offerings of blood at the altar of a deity. Abstinence from food for the benefit of the ghost, develops into fasting as a pious practice; and journeys to the grave with gifts, become pilgrimages to the shrine. Praises of the dead and prayers to them, grow into religious praises and prayers. And so every religious rite is derived from a funeral rite.

After finding that the earliest conception of a supernatural being, and the one which remains common to all races, is that of a ghost, and after finding that the ways of propitiating a ghost were in every case the originals of the ways of propitiating deities; the question was raised whether the

ghost is not the type of supernatural being out of which all other types are evolved. The facts named in justification of an affirmative answer were of several classes. From the lips of primitive peoples themselves, were quoted proofs that out of ghost-worship in general, there grew up the worship of remote ancestral ghosts, regarded as creators or deities. Worship of deities so evolved, we found characterized ancient societies in both hemispheres co-existing in them with elaborate worship of the recent dead. Evidence was given that by the highest races as by the lowest, ancestor-worship, similarly practised, similarly originated deities, and we saw that it even now survives among the highest races, though overshadowed by a more developed worship. Concluding, then, that from worship of the dead every other kind of worship has probably arisen, we proceeded to examine those worships which do not externally resemble it, to see whether they have traceable kinships.

From the corpse receiving daily offerings before burial, to the embalmed body similarly cared for, and thence to figures formed partly of the dead man's remains and partly of other things, we passed to figures wholly artificial: so finding that the effigy of a dead man supplied with food, etc., is then propitiated in place of him. Proof was found that this effigy of the dead man occasionally becomes the idol of a god; while this continued propitiation becomes an established worship of it. And since the doubles of the dead, believed to be present in these images of them, are the real objects to which offerings are made, it follows that all idolatry, hence arising, is a divergent development of ancestor-worship. As this belief extends to objects rudely resembling human beings, and to supposed parts of human beings, as well as to those which by contact with their bodies have absorbed their odour or spirit, it results that resident ghosts come to be assumed in many things besides idols especially those having extraordinary appearances, properties, actions. That the propitiation of the in-

habiting ghosts, constituting fetishism, is thus a collateral result of the ghost-theory, is shown by various facts; but especially by the fact that fetishism is absent where the ghost-theory is absent or but little developed, and extends in proportion as the ghost-theory evolves.

It was demonstrated that animal-worship is another derivative form of ancestor-worship. Actual and apparent metamorphoses occurring in the experiences of the savage, encourage belief in metamorphosis when anything suggests it. all races showing us that the transformation of men into animals and of animals into men, is a familiar thought. Hence house-haunting creatures are supposed to be the dead returned in new shapes; and creatures which frequent the burial-place are taken for other disguises which souls put on. Further, the widely-prevalent habit of naming men after animals, leads, by the inevitable misinterpretation of traditions, to beliefs in descent from animals. And thus the sacred animal, now treated with exceptional respect, now propitiated, now worshipped, acquires its divine character by identification with an ancestor, near or remote.

Similarly with plant-worship. In every case this is the worship of a spirit originally human, supposed to be contained in the plant—supposed either because of the exciting effects of its products, or because misapprehended tradition raises the belief that the race descended from it; or because a misinterpreted name identifies it with an ancestor. Everywhere the propitiated plant-spirit is shown by its conceived human form, and ascribed human desires, to have originated from a human personality.

Even worship of the greater objects and powers in Nature proves to have the same root. When it marks the place whence the race came, a mountain is described in tradition as the source or parent of the race, as is probably the sea in some cases; and both also give family names: worship of them as ancestors thus arising in two ways. Facts imply that the conception of the dawn as a person, results from

the giving of dawn as a birth-name. The personalization of stars and of constellations, we found associated among inferior races with the belief that they are men and animals who once lived on the earth. So, too, is it with the Moon. Traditions of people in low stages tell of the Moon as having been originally a man or woman; and the Moon is still a source of birth-names among the uncivilized—the implication being that reverence for it is reverence for a departed person. Lastly, worship of the Sun is derived in two ways from ancestor-worship. Here conquerors coming from the region of sunrise, and therefore called “children of the Sun,” come to regard the Sun as ancestor; and there the Sun is a metaphorical name given to an individual, either because of his appearance, or because of his achievements or because of his exalted position. whence identification with the Sun in tradition, and consequent Sun-worship.

Besides these aberrant developments of ancestor-worship which result from identification of ancestors with idols, animals, plants, and natural powers, there are direct developments of it. Out of the assemblage of ghosts, some evolve into deities who retain their anthropomorphic characters. As the divine and the superior are, in the primitive mind, equivalent ideas—as the living man and re-appearing ghost are at first confounded in his beliefs—as ghost and god are originally convertible terms; we may understand how the deity develops out of the powerful man, and the ghost of the powerful man, by small steps. Within the tribe the chief, the magician, or the man otherwise skilled, held in awe during his life as showing powers of unknown origin and extent, is feared in a higher degree when, after death, he gains the further powers possessed by all ghosts and still more the stranger bringing new arts, as well as the conqueror of superior race, is treated as a superhuman being during life and afterwards worshipped as a yet greater superhuman being. Remembering that the most marvellous version of any story habitually obtains the greatest currency

and that so, from generation to generation, the deeds of such traditional persons must grow by unchecked exaggerations eagerly listened to, we may see that in time any amount of expansion and idealization can be reached.

Thus it becomes manifest that setting out with the wandering double which the dream suggests, passing to the double that goes away at death; advancing from this ghost, at first supposed to have but a transitory second life, to ghosts which exist permanently and therefore accumulate; the primitive man is led gradually to people surrounding space with supernatural beings which inevitably become in his mind causal agents for everything unfamiliar. And in consistently carrying out the mode of interpretation initiated in this way, he is committed to the ever-multiplying superstitions we have traced out

§ 207. How entirely natural is the genesis of these beliefs, will be seen on now observing that the Law of Evolution is as clearly exemplified by it as by every other natural process. I do not mean merely that, as we have found, a system of superstition arises by continuous growth, each stage of which leads to the next, but I mean that the general formula of Evolution is conformed to by it.

The process of integration is, in the first place, shown us by simple increase of mass. In extremely low tribes who have but faint and wavering beliefs in the doubles of the dead, there is no established group of supposed supernatural beings. Among the more advanced, who hold that ghosts have temporary second lives, the dead members of the tribe form an imagined assemblage which, though continually augmented, is continually dissolving away—a cluster which does not increase because the subtractions equal the additions. But when, later, there arises the belief in a permanently-existing ghost, this cluster necessarily grows; and its growth becomes great in proportion both as the society enlarges and as traditions are longer preserved.

Hence such a multiplication of supernatural beings that even the superior among them are scarcely numerable. Gomara tells us that "the gods of Mexico are said to number 2,000"; and to this number must be joined the far greater numbers of demons, spirits, and ghosts of undistinguished persons, recognized in every locality. A like immense increase by simple integration was exhibited in ancient mythologies; and is now exhibited by the mythology of India, as well as by that of Japan.

Along with this increase of mass, conforming to the Law of Evolution, there goes increase of coherence. The superstitions of the primitive man are loose and inconsistent: different members of a tribe make different statements; and the same individual varies in his interpretations as occasion suggests. But in course of time the beliefs are elaborated into a well-knit system. Further, the hypothesis to which the ghost-theory leads, at first limited to anomalous occurrences, extends itself to all phenomena; so that the properties and actions of surrounding things, as well as the thoughts and feelings of men, are ascribed to unseen beings, who thus constitute a combined mechanism of causation.

While increasing in mass and in coherence, the supernatural aggregate increases in heterogeneity. Substantially similar as ghosts are at first conceived to be, they become unlike as fast as the tribe grows, complicates, and begins to have a history: the ghost-fauna, almost homogeneous at the outset, differentiates. Originally, the only distinctions of good or bad among the doubles of the dead, are such as were shown by the living men; as are also the only unlikenesses of power. But there soon arise conceived contrasts in goodness between the ghosts of relatives and the ghosts of other persons; as well as stronger contrasts between friendly ghosts belonging to the tribe and malicious ghosts belonging to other tribes. When social ranks are established, there follow contrasts of rank and accompanying potency among supernatural beings; which, as

legends expand, grow more and more marked. Eventually there is formed in this way a hierarchy of partially-deified ancestors, demigods, great gods, and among the great gods one who is supreme, while there is simultaneously formed a hierarchy of diabolical powers. Then come those further differentiations which specialize the functions and habitats of these supernatural beings, until each mythology has its great and small presiding agents, from Apollo down to a dryad, from Thor down to a water-sprite, from a Saint down to a fairy. So that out of the originally small and almost uniform aggregate of supernatural beings, there gradually comes an aggregate as multiform as it is vast.

Change from the indefinite to the definite is no less clearly displayed. That early stage in which men show fear of the dead and yet do not themselves expect any future existence, shows us an extreme indefiniteness of the ghost-theory. Even after the ghost-theory is well established the beliefs in the resulting supernatural beings, though strong, are indistinct. At the same time that Livingstone describes the people of Angola as "constantly deprecating the wrath of departed souls," he says that they "have half-developed ideas and traditions of something or other, they know not what." And kindred accounts of uncivilized races elsewhere, are given by various travellers. But along with progress there goes increasing clearness of these conceptions. The different kinds of supernatural beings grow more defined in their forms, dispositions, powers, habits; until, in developed mythologies, they are specifically and even individually distinguished by attributes precisely stated.

Undeniably, then, the beliefs constituting a system of superstitions evolve after the same manner as all other things. By a process of continuous integration and differentiation, they are formed into an aggregate which, while increasing, passes from an indefinite incoherent homogeneity to a definite coherent heterogeneity. This correspondence is, indeed, inevitable. The law which is conformed to by the

evolving human being, and which is consequently conformed to by the evolving human intelligence, is of necessity conformed to by all products of that intelligence. Expressing itself in structures, and by implication in the functions of those structures, this law cannot but express itself in the concrete manifestations of those functions. Just as language, considered as an objective product, bears the impress of this subjective process, so, too, does that system of ideas concerning the nature of things, which the mind gradually elaborates. The theory of the Cosmos, beginning with fitful ghost-agency, and ending with the orderly action of a universal Unknown Power, exemplifies once more the law fulfilled by all ascending transformations.

So that in fact the hypothesis of Evolution absorbs the antagonist hypotheses preceding it, and strengthens itself by assimilating their components.

CHAPTER XXVII.

THE SCOPE OF SOCIOLOGY.

§ 208. THROUGH the minds of some who are critical respecting logical order, there has doubtless passed the thought that, along with the Data of Sociology, the foregoing chapters have included much which forms a part of Sociology itself. Admitting an apparent justification for this objection, the reply is that in no case can the data of a science be stated before some knowledge of the science has been reached, and that the analysis which discloses the data cannot be made without reference to the aggregate of phenomena analyzed. For example, in Biology the interpretation of functions implies knowledge of the various physical and chemical actions going on throughout the organism. Yet these physical and chemical actions become comprehensible only as fast as the relations of structures and reciprocities of functions become known; and, further, these physical and chemical actions cannot be described without reference to the vital actions interpreted by them. Similarly in Sociology, it is impossible to explain the origin and development of those ideas and sentiments which are leading factors in social evolution, without referring directly or by implication to the phases of that evolution.

(The need for this preliminary statement of data, and the

especial need for the latter part of it, will be seen when the results are gathered up, generalized, and formulated.

§ 209. After recognizing the truth that the phenomena of social evolution are determined partly by the external actions to which the social aggregate is exposed, and partly by the natures of its units, and after observing that these two sets of factors are themselves progressively changed as the society evolves; we glanced at these two sets of factors in their original forms.

A sketch was given of the conditions, inorganic and organic, on various parts of the earth's surface; showing the effects of cold and heat, of humidity and dryness, of surface, contour, soil, minerals, of floras and faunas. After seeing how social evolution in its earlier stages depends entirely on a favourable combination of circumstances, and after seeing that though, along with advancing development, there goes increasing independence of circumstances, these ever remain important factors; it was pointed out that while dealing with principles of evolution which are common to all societies, we might neglect those special external factors which determine some of their special characters.

Our attention was then directed to the internal factors as primitive societies display them. An account was given of "The Primitive Man—Physical": showing that by stature, structure, strength, as well as by callousness and lack of energy, he was ill fitted for overcoming the difficulties in the way of advance. Examination of "The Primitive Man—Emotional," led us to see that his improvidence and his explosiveness, restrained but little by sociality and by the altruistic sentiments, rendered him unfit for co-operation. And then, in the chapter on "The Primitive Man—Intellectual," we saw that while adapted by its active and acute perceptions to primitive needs, his type of mind is deficient in the faculties required for progress in knowledge.

After recognizing these as the general traits of the pri-

mitive social unit, we found that there remained to be noted certain more special traits, implied by his ideas and their accompanying sentiments. This led us to trace the genesis of those beliefs concerning his own nature and the nature of surrounding things, which were summed up in the last chapter. And now observe the general conclusion reached. It is that while the conduct of the primitive man is in part determined by the feelings with which he regards men around him, it is in part determined by the feelings with which he regards men who have passed away. From these two sets of feelings, result two all-important sets of social factors. While *the fear of the living* becomes the root of the political control, *the fear of the dead* becomes the root of the religious control. On remembering how large a share the resulting ancestor-worship had in regulating life among the people who, in the Nile-valley, first reached a high civilization—on remembering that the ancient Peruvians were subject to a rigid social system rooted in an ancestor-worship so elaborate that the living might truly be called slaves of the dead—on remembering that in China, too, there has been, and still continues, a kindred worship generating kindred restraints; we shall perceive, in the fear of the dead, a social factor which is, at first, not less important, if indeed it is not more important, than the fear of the living.

And thus is made manifest the need for the foregoing account of the origin and development of this trait in the social units, by which co-ordination of their actions is rendered possible.

§ 210. Setting out with social units as thus conditioned, as thus constituted physically, emotionally, and intellectually, and as thus possessed of certain early-acquired ideas and correlative feelings, the Science of Sociology has to give an account of all the phenomena that result from their combined actions.

The simplest of such combined actions are those by which the successive generations of units are produced, reared, and brought into fitness for co-operation. The development of the family thus stands first in order. The respective ways in which the fostering of offspring is influenced by promiscuity, by polyandry, by polygyny, and by monogamy, have to be traced; as have also the results of exogamous marriage and endogamous marriage. These, considered first as affecting the maintenance of the race in number and quality, have also to be considered as affecting the domestic lives of adults. Moreover, beyond observing how the several forms of the sexual relations modify family-life, they have to be treated in connexion with public life; on which they act and which reacts on them. And then, after the sexual relations, have to be similarly dealt with the parental and filial relations.

Sociology has next to describe and explain the rise and development of that political organization which in several ways regulates affairs—which combines the actions of individuals for purposes of tribal or national offence and defence, which restrains them in certain of their dealings with one another; and which also restrains them in certain of their dealings with themselves. It has to trace the relations of this co-ordinating and controlling apparatus to the area occupied, to the amount and distribution of population, to the means of communication. It has to show the differences of form which this agency presents in the different social types, nomadic and settled, military and industrial. It has to describe the changing relations between this regulative structure which is unproductive, and those structures which carry on production and make national life possible. It has also to set forth the connexions between, and reciprocal influences of, the institutions carrying on civil government, and the other governmental institutions simultaneously developing—the ecclesiastical and the ceremonial. And then it has to take account of those modi-

fications which persistent political restraints are ever working in the characters of the social units, as well as the modifications worked by the reactions of the changed characters of the units on the political organization.

There has to be similarly described the evolution of the ecclesiastical structures and functions. Commencing with these as united to, and often scarcely distinguishable from, the political structures and functions, their divergent developments must be traced. How the share of ecclesiastical agencies in political actions becomes gradually less, how, reciprocally, political agencies play a decreasing part in ecclesiastical actions; are phenomena to be set forth. How the internal organization of the priesthood, differentiating and integrating as the society grows, stands related in type to the co-existing organizations, political and other, and how changes of structure in it are connected with changes of structure in them; are also subjects to be dealt with. Further, there has to be shown the progressive divergence between the set of rules gradually framed into civil law, and the set of rules which the ecclesiastical organization enforces; and in this second set of rules there has to be traced the divergence between those which become a code of religious ceremonial and those which become a code of ethical precepts. Once more the science has to note how the ecclesiastical agency in its structure, functions, laws, creed, and morals, stands related to the mental nature of the citizens; and how the actions and reactions of the two mutually modify them.

The simultaneously-evolving system of restraints whereby the minor actions of citizens are regulated in daily life, has next to be dealt with. Ancillary to the political and ecclesiastical controls, and at first inseparable from them, is the control embodied in ceremonial observances; which, beginning with rules of class-subordination, grow into rules of intercourse between man and man. The mutilations which mark conquest and become badges of servi-

tude, the obeisances which are originally signs of submission made by the conquered; the titles which are words directly or metaphorically attributing mastery over those who utter them, the salutations which are also the flattering professions of subjection and implied inferiority—these, and some others, have to be traced in their genesis and development as a supplementary regulative agency. The growth of the structure which maintains observances, the accumulation, complication, and increasing definition of observances; and the resulting code of bye-laws of conduct which comes to be added to the civil and religious codes, have to be severally delineated. These regulative arrangements, too, must be considered in their relations to co-existing regulative arrangements; with which they all along maintain a certain congruity in respect of coerciveness. And the reciprocal influences exercised by these restraints on men's natures, and by men's natures on them, need setting forth.

Co-ordinating structures and functions having been dealt with, there have to be dealt with the structures and functions co-ordinated. The regulative and the operative are the two most generally contrasted divisions of every society; and the inquiries of highest importance in social science concern the relations between them. The stages through which the industrial part passes, from its original union with the governmental part to its ultimate separateness, have to be studied. An allied subject of study is the growth of those regulative structures which the industrial part develops within itself. For purposes of production the actions of its units have to be directed, and the various forms of the directive apparatus have to be dealt with—the kinds of government under which separate groups of workers act; the kinds of government under which workers in the same business and of the same class are combined (eventually differentiating into guilds and into unions), and the kind of government which keeps in balance the activities of the various industrial

structures. The relations between the forms of these industrial governments and the forms of the co-existing political and ecclesiastical governments, have to be considered at each successive stage; as have also the relations between each of these successive forms and the natures of the citizens: there being here, too, a reciprocity of influences. After the regulative part of the industrial organization comes the operative part, also presenting its successive stages of differentiation and integration. The separation of the distributive system from the productive system having been first traced, there has to be traced the growing division of labour within each—the rise of grades and kinds of distributors as well as grades and kinds of producers. And then there have to be added the effects which the developing and differentiating industries produce on one another—the advances of the industrial arts themselves, caused by the help received from one another's improvements.

After these structures and functions which make up the organization and life of each society, have to be treated certain associated developments which aid, and are aided by, social evolution—the developments of language, knowledge, morals, æsthetics. Linguistic progress has to be considered first as displayed in language itself, while passing from a relatively incoherent, indefinite, homogeneous state, to states that are successively more coherent, definite, and heterogeneous. We have to note how increasing social complexity conduces to increasing complexity of language; and how, as a society becomes settled, it becomes possible for its language to acquire permanence. The connexion between the developments of words and sentences and the correlative developments of thought which they aid, and which are aided by them, has to be observed: the reciprocity being traced in the increasing multiplicity, variety, exactness, which each helps the other to gain. Progress in intelligence, thus associated

with progress in language, has also to be treated as an accompaniment of social progress; which, while furthering it, is furthered by it. From experiences which accumulate and are recorded, come comparisons leading to generalizations of simple kinds. Gradually the ideas of uniformity, order, cause, becoming nascent, gain clearness with each fresh truth established. And while there have to be noted the connexion between each phase of science and the concomitant phase of social life, there have also to be noted the stages through which, within the body of science itself, there is an advance from a few, simple, incoherent truths, to a number of specialized sciences forming a body of truths that are multitudinous, varied, exact, coherent.

The emotional modifications which, as indicated above, accompany social modifications, both as causes and as consequences, also demand separate attention. Besides observing the inter-actions of the social state and the moral state, we have to observe the associated modifications of those moral codes in which moral feelings get their intellectual expression. The kind of behaviour which each kind of *régime* necessitates, finds for itself a justification which acquires an ethical character; and hence ethics must be dealt with in their social dependences.

Then come the groups of phenomena we call æsthetic; which, as exhibited in art-products and in the correlative sentiments, have to be studied in their respective evolutions internally considered, and in the relations of those evolutions to accompanying social phenomena. Diverging as they do from a common root, architecture, sculpture, painting, together with dancing, music, and poetry, have to be severally treated as connected with the political and ecclesiastical stages, with the co-existing phases of moral sentiment, and with the degrees of intellectual advance.

Finally we have to consider the inter-dependence of structures, and functions, and products, taken in their totality.

Not only do all the above-enumerated organizations, domestic, political, ecclesiastical, ceremonial, industrial, influence one another through their respective activities; and not only are they all daily influenced by the states of language, knowledge, morals, arts, but the last are severally influenced by them, and are severally influenced by one another. Among these many groups of phenomena there is a *consensus*; and the highest achievement in Sociology is so to grasp the vast heterogeneous aggregate, as to see how each group is at each stage determined partly by its own antecedents and partly by the past and present actions of the rest upon it.

§ 211. But now before trying to explain these most involved phenomena, we must learn by inspecting them the actual relations of co-existence and sequence in which they stand to one another. By comparing societies of different kinds, and societies in different stages, we must ascertain what traits of size, structure, function, etc., are habitually associated. In other words, before deductive interpretation of the general truths, there must come inductive establishment of them.

Here, then, ending preliminaries, let us examine the facts of Sociology, for the purpose of seeing into what empirical generalizations they may be arranged.

PART II.

THE INDUCTIONS OF SOCIOLOGY.

forgave but rejoiced over this return towards military rule. .

§ 267. Of course social metamorphoses are in every case complicated and obscured by special causes never twice alike. Where rapid growth is going on, the changes of structure accompanying increase of mass are involved with the changes of structure resulting from modification of type. Further, the disentanglement of the facts is made difficult when the two great systems of organs for sustentation and external action are evolving simultaneously. This is our own case. That re-development of structures for external action which we have been tracing, and that partial return to the congruous social system, have not arrested the development of the sustaining structures and that social system they foster. Hence sundry changes opposite to those enumerated above. While the revival of ecclesiasticism having for cardinal principle assertion of authority, has harmonized with this reversion towards the militant type, the increase of divisions in the Church, the assertions of individual judgment, and the relaxations of dogma, have harmonized with the contrary movement. While new educational organizations tending towards regimental uniformity, are by each new Act of Parliament made more rigid, the old educational organizations in public schools and universities, are being made more plastic and less uniform. While there have been increasing interferences with the employment of labour, wholly at variance with the principles of voluntary co-operation, they have not yet gone far enough quite to reverse the free-trade policy which industrial evolution has been extending. The interpretation appears to be that while the old compulsory system of regulation has been abolished where its pressure had become intolerable, this re-development of it is going on where its pressure has not yet been felt.

Moreover the vast transformation suddenly caused by railways and telegraphs, adds to the difficulty of tracing

metamorphoses of the kinds we are considering. Within a generation the social organism has passed from a stage like that of a cold-blooded creature with feeble circulation and rudimentary nerves, to a stage like that of a warm-blooded creature with efficient vascular system and a developed nervous apparatus. To this more than to any other cause, are due the great changes in habits, beliefs, and sentiments, characterizing our generation. Manifestly, this rapid evolution of the distributing and internuncial structures, has aided the growth of both the industrial organization and the militant organization. While productive activities have been immensely facilitated, there has been a furtherance of that centralization characterizing the social type required for offensive and defensive actions.

But notwithstanding these disguising complexities, if we contrast the period from 1815 to 1850 with the period from 1850 to the present time, we cannot fail to see that along with increased armaments, more frequent conflicts, and revived military sentiment, there has been an increase of compulsory regulations. While nominally extended by the giving of votes, the freedom of the individual has been in many ways actually diminished, both by restrictions which ever-multiplying officials are appointed to insist on, and by the forcible taking of money to secure for him, or others at his expense, benefits previously left to be secured by each for himself. And undeniably this is a return towards that coercive discipline which pervades the whole social life where the militant type is predominant.

In metamorphoses, then, so far as they are traceable, we discern general truths harmonizing with those disclosed by comparison of types. With social organisms, as with individual organisms, the structure becomes adapted to the activity. In the one case as in the other, if circumstances entail a fundamental change in the mode of activity, there by-and-by results a fundamental change in the form of structure. And in both cases there is a reversion towards the old type if there is a resumption of the old activities.

CHAPTER I.

WHAT IS A SOCIETY ?

§ 212. THIS question has to be asked and answered at the outset. Until we have decided whether or not to regard a society as an entity, and until we have decided whether, if regarded as an entity, a society is to be classed as absolutely unlike all other entities or as like some others; our conception of the subject-matter before us remains vague.

It may be said that a society is but a collective name for a number of individuals. Carrying the controversy between nominalism and realism into another sphere, a nominalist might affirm that just as there exist only the members of a species, while the species considered apart from them has no existence; so the units of a society alone exist, while the existence of the society is but verbal. Instancing a lecturer's audience as an aggregate which by disappearing at the close of the lecture, proves itself to be not a thing but only a certain arrangement of persons, he might argue that the like holds of the citizens forming a nation.

But without disputing the other steps of his argument, the last step may be denied. The arrangement, temporary in the one case, is lasting in the other, and it is the permanence of the relations among component parts which constitutes the individuality of a whole as distinguished from the individualities of its parts. A coherent mass broken into fragments ceases to be a thing, while, con-

versely, the stones, bricks, and wood, previously separate, become the thing called a house if connected in fixed ways.

Thus we consistently regard a society as an entity, because, though formed of discrete units, a certain concreteness in the aggregate of them is implied by the maintenance, for generations and centuries, of a general likeness of arrangement throughout the area occupied. And it is this trait which yields our idea of a society. For, withholding the name from an ever-changing cluster such as primitive men form, we apply it only where some constancy in the distribution of parts has resulted from settled life.

§ 213. But now, regarding a society as a thing, what kind of thing must we call it? It seems totally unlike every object with which our senses acquaint us. Any likeness it may possibly have to other objects, cannot be manifest to perception, but can be discerned only by reason. If the constant relations among its parts make it an entity; the question arises whether these constant relations among its parts are akin to the constant relations among the parts of other entities. Between a society and anything else, the only conceivable resemblance must be one due to *parallelism of principle in the arrangement of components*.

There are two great classes of aggregates with which the social aggregate may be compared—the inorganic and the organic. Are the attributes of a society, considered apart from its living units, in any way like those of a not-living body? or are they in any way like those of a living body? or are they entirely unlike those of both?

The first of these questions needs only to be asked to be answered in the negative. A whole of which the parts are alive, cannot, in its general characters, be like lifeless wholes. The second question, not to be thus promptly answered, is to be answered in the affirmative. The reasons for asserting that the permanent relations among the parts of a society, are analogous to the permanent relations among the parts of a living body, we have now to consider.

CHAPTER II.

A SOCIETY IS AN ORGANISM

§ 214. WHEN we say that growth is common to social aggregates and organic aggregates, we do not thus entirely exclude community with inorganic aggregates some of these, as crystals, grow in a visible manner, and all of them, on the hypothesis of evolution, are concluded to have arisen by integration at some time or other. Nevertheless, compared with things we call inanimate, living bodies and societies so conspicuously exhibit augmentation of mass, that we may fairly regard this as characteristic of them both. Many organisms grow throughout their lives ; and the rest grow throughout considerable parts of their lives. Social growth usually continues either up to times when the societies divide, or up to times when they are overwhelmed.

Here, then, is the first trait by which societies ally themselves with the organic world and substantially distinguish themselves from the inorganic world .

§ 215 It is also a character of social bodies, as of living bodies, that while they increase in size they increase in structure. A low animal, or the embryo of a high one, has few distinguishable parts ; but along with its acquirement of greater mass, its parts multiply and simultaneously differentiate It is thus with a society. At first the unlikenesses among its groups of units are inconspicuous in number and

degree; but as it becomes more populous, divisions and sub-divisions become more numerous and more decided. Further, in the social organism as in the individual organism, differentiations cease only with that completion of the type which marks maturity and precedes decay.

Though in inorganic aggregates also, as in the entire solar system and in each of its members, structural differentiations accompany the integrations; yet these are so relatively slow, and so relatively simple, that they may be disregarded. The multiplication of contrasted parts in bodies politic and in living bodies, is so great that it substantially constitutes another common character which marks them off from inorganic bodies.

§ 216. This community will be more fully appreciated on observing that progressive differentiation of structures is accompanied by progressive differentiation of functions.

The multiplying divisions, primary, secondary, and tertiary, which arise in a developing animal, do not assume their major and minor unlikenesses to no purpose. Along with diversities in their shapes and compositions there go diversities in the actions they perform they grow into unlike organs having unlike duties. Assuming the entire function of absorbing nutriment at the same time that it takes on its structural characters, the alimentary system becomes gradually marked off into contrasted portions; each of which has a special function forming part of the general function. A limb, instrumental to locomotion or prehension, acquires divisions and sub-divisions which perform their leading and their subsidiary shares in this office. So is it with the parts into which a society divides. A dominant class arising does not simply become unlike the rest, but assumes control over the rest, and when this class separates into the more and the less dominant, these, again, begin to discharge distinct parts of the entire control. With the classes whose actions are controlled it is the same. The various groups

into which they fall have various occupations : each of such groups also, within itself, acquiring minor contrasts of parts along with minor contrasts of duties

And here we see more clearly how the two classes of things we are comparing distinguish themselves from things of other classes ; for such differences of structure as slowly arise in inorganic aggregates, are not accompanied by what we can fairly call differences of function.

§ 217. Why in a body politic and in a living body, these unlike actions of unlike parts are properly regarded by us as functions, while we cannot so regard the unlike actions of unlike parts in an inorganic body, we shall perceive on turning to the next and most distinctive common trait.

Evolution establishes in them both, not differences simply, but definitely-connected differences—differences such that each makes the others possible. The parts of an inorganic aggregate are so related that one may change greatly without appreciably affecting the rest. It is otherwise with the parts of an organic aggregate or of a social aggregate. In either of these the changes in the parts are mutually determined, and the changed actions of the parts are mutually dependent. In both, too, this mutuality increases as the evolution advances. The lowest type of animal is all stomach, all respiratory surface, all limb. Development of a type having appendages by which to move about or lay hold of food, can take place only if these appendages, losing power to absorb nutriment directly from surrounding bodies, are supplied with nutriment by parts which retain the power of absorption. A respiratory surface to which the circulating fluids are brought to be aerated, can be formed only on condition that the concomitant loss of ability to supply itself with materials for repair and growth, is made good by the development of a structure bringing these materials. So is it in a society. What we call with perfect propriety its organization, has a necessary implication of the same kind,

While rudimentary, it is all warrior, all hunter, all hut-builder, all tool-maker : every part fulfils for itself all needs. Progress to a stage characterized by a permanent army, can go on only as there arise arrangements for supplying that army with food, clothes, and munitions of war by the rest. If here the population occupies itself solely with agriculture and there with mining—if these manufacture goods while those distribute them ; it must be on condition that in exchange for a special kind of service rendered by each part to other parts, these other parts severally give due proportions of their services.

This division of labour, first dwelt on by political economists as a social phenomenon, and thereupon recognized by biologists as a phenomenon of living bodies, which they called the “physiological division of labour,” is that which in the society, as in the animal, makes it a living whole. Scarcely can I emphasize sufficiently the truth that in respect of this fundamental trait, a social organism and an individual organism are entirely alike. When we see that in a mammal, arresting the lungs quickly brings the heart to a stand, that if the stomach fails absolutely in its office all other parts by-and-by cease to act ; that paralysis of its limbs entails on the body at large death from want of food or inability to escape, that loss of even such small organs as the eyes, deprives the rest of a service essential to their preservation, we cannot but admit that mutual dependence of parts is an essential characteristic. And when, in a society, we see that the workers in iron stop if the miners do not supply materials ; that makers of clothes cannot carry on their business in the absence of those who spin and weave textile fabrics ; that the manufacturing community will cease to act unless the food-producing and food-distributing agencies are acting ; that the controlling powers, governments, bureaux, judicial officers, police, must fail to keep order when the necessities of life are not supplied to them by the parts kept in order, we are obliged to say that this

mutual dependence of parts is similarly rigorous. Unlike as the two kinds of aggregates are in sundry respects, they are alike in respect of this fundamental character, and the characters implied by it.

§ 218. How the combined actions of mutually-dependent parts constitute life of the whole, and how there hence results a parallelism between national life and individual life, we see still more clearly on learning that the life of every visible organism is constituted by the lives of units too minute to be seen by the unaided eye.

An undeniable illustration is furnished us by the strange order *Myxomycetes*. The spores or germs produced by one of these forms, become ciliated monads which, after a time of active locomotion, change into shapes like those of amœbæ, move about, take in nutriment, grow, multiply by fission. Then these amœba-form individuals swarm together, begin to coalesce into groups, and these groups to coalesce with one another making a mass sometimes barely visible, sometimes as big as the hand. This *plasmodium*, irregular, mostly reticulated, and in substance gelatinous, itself exhibits movements of its parts like those of a gigantic rhizopod; creeping slowly over surfaces of decaying matters and even up the stems of plants. Here, then, union of many minute living individuals to form a relatively vast aggregate in which their individualities are apparently lost, but the life of which results from combination of their lives, is demonstrable.

In other cases, instead of units which, originally discrete, lose their individualities by aggregation, we have units which, arising by multiplication from the same germ, do not part company, but nevertheless display their separate lives very clearly. A growing sponge has its horny fibres clothed with a gelatinous substance, and the microscope shows this to consist of moving monads. We cannot deny life to the sponge as a whole, for it shows us some corporate ac-

tions. The outer amoeba-form units partially lose their individualities by fusion into a protective layer or skin; the supporting framework of fibres is produced by the joint agency of the monads; and from their joint agency also result those currents of water which are drawn in through the small orifices and expelled through the larger. But while there is thus shown a feeble aggregate life, the lives of the myriads of component units are very little subordinated: these units form, as it were, a nation having scarcely any sub-division of functions. Or, in the words of Professor Huxley, "the sponge represents a kind of sub-aqueous city, where the people are arranged about the streets and roads, in such a manner, that each can easily appropriate his food from the water as it passes along."

Even in the highest animals there remains traceable this relation between the aggregate life and the lives of components. Blood is a liquid in which, along with nutritive matters, circulate innumerable living units—the blood corpuscles. These have severally their life-histories. During its first stage each of them, then known as a white corpuscle, makes independent movements like those of an amoeba, and though in its adult stage as a red, flattened disc, it is not visibly active, its individual life continues. Nor is this individual life of the units provable only where free flotation in a liquid allows its signs to be readily seen. Sundry mucous surfaces, as those of the air passages, are covered with what is called ciliated epithelium—a layer of minute cells packed side by side, and each bearing on its exposed end several cilia continually in motion. The wavings of these cilia are essentially like those of the monads which live in the passages running through a sponge; and just as the joint action of these ciliated sponge monads propels the current of water, so does the joint action of the ciliated epithelium cells move forward the mucous secretion covering them. If there needs further proof of the individual lives of these epithelium cells, we have it in

the fact that when detached and placed in fluid, they "move about with considerable rapidity for some time, by the continued vibrations of the cilia with which they are furnished "

On thus seeing that an ordinary living organism may be regarded as a nation of units that live individually, and have many of them considerable degrees of independence, we shall perceive how truly a nation of human beings may be regarded as an organism.

§ 219. The relation between the lives of the units and the life of the aggregate, has a further character common to the two cases. By a catastrophe the life of the aggregate may be destroyed without immediately destroying the lives of all its units ; while, on the other hand, if no catastrophe abridges it, the life of the aggregate immensely exceeds in length the lives of its units.

In a cold-blooded animal, ciliated cells perform their motions with perfect regularity long after the creature they are part of has become motionless , muscular fibres retain their power of contracting under stimulation ; the cells of secreting organs go on pouring out their product if blood is artificially supplied to them ; and the components of an entire organ, as the heart, continue their co-operation for many hours after its detachment . Similarly, arrest of those commercial activities and governmental co-ordinations, etc , which constitute the corporate life of a nation, may be caused, say by an inroad of barbarians, without immediately stopping the actions of all the units. Certain classes of these, especially the widely-diffused ones engaged in food-production, may, in the remoter districts, long survive and carry on their individual occupations.

Conversely, in both cases, if not brought to a close by violence, the life of the aggregate greatly exceeds in duration the lives of its units. The minute living elements composing a developed animal, severally evolve, play their

parts, decay, and are replaced, while the animal as a whole continues. In the deep layer of the skin, cells are formed by fission which, as they enlarge, are thrust outwards, and becoming flattened to form the epidermis, eventually exfoliate, while the younger ones beneath take their places. Liver-cells, growing by imbibition of matters from which they separate the bile, presently die, and their vacant seats are occupied by another generation. Even bone, though so dense and seemingly inert, is permeated by blood-vessels carrying materials to replace old components by new ones. And the replacement, rapid in some tissues and in others slow, goes on at such rate that during the continued existence of the entire body, each portion of it has been many times over produced and destroyed. Thus it is also with a society and its units. Integrity of the whole and of each large division is perennially maintained, notwithstanding the deaths of component citizens. The fabric of living persons which, in a manufacturing town, produces some commodity for national use, remains after a century as large a fabric, though all the masters and workers who a century ago composed it have long since disappeared. Even with the minor parts of this industrial structure the like holds. A firm that dates from past generations, still carrying on business in the name of its founder, has had all its members and *employés* changed one by one, perhaps several times over, while the firm has continued to occupy the same place and to maintain like relations to buyers and sellers. Throughout we find this. Governing bodies, general and local, ecclesiastical corporations, armies, institutions of all orders down to guilds, clubs, philanthropic associations, etc., show us a continuity of life exceeding that of the persons constituting them. Nay, more. As part of the same law, we see that the existence of the society at large exceeds in duration that of some of these compound parts. Private unions, local public bodies, secondary national institutions, towns carrying on special industries, may decay,

while the nation, maintaining its integrity, evolves in mass and structure.

In both cases, too, the mutually-dependent functions of the various divisions, being severally made up of the actions of many units, it results that these units dying one by one, are replaced without the function in which they share being sensibly affected. In a muscle each sarcous element wearing out in its turn, is removed and a substitution made while the rest carry on their combined contractions as usual; and the retirement of a public official or death of a shopman, perturbs inappreciably the business of the department, or activity of the industry, in which he had a share.

Hence arises in the social organism, as in the individual organism, a life of the whole quite unlike the lives of the units; though it is a life produced by them.

§ 220. From these likenesses between the social organism and the individual organism, we must now turn to an extreme unlikeness. The parts of an animal form a concrete whole, but the parts of a society form a whole that is discrete. While the living units composing the one are bound together in close contact, the living units composing the other are free, not in contact, and more or less widely dispersed. How, then, can there be any parallelism?

Though this difference is fundamental and apparently puts comparison out of the question, yet examination proves it to be less than it seems. Presently I shall have to point out that complete admission of it consists with maintenance of the alleged analogy, but we will first observe how one who thought it needful, might argue that even in this respect there is more kinship than a cursory glance shows.

He might urge that the physically-coherent body of an animal is not composed all through of living units; but that it consists in large measure of differentiated parts which the vitally active parts have formed, and which thereafter become semi-vital and in some cases almost un-vital. Taking

is an example the protoplasmic layer underlying the skin, he might say that while this consists of truly living units, the cells produced in it, changing into epithelium scales, become inert protective structures, and pointing to the insensitive nails, hair, horns, and teeth, arising from this layer, he might show that such parts, though components of the organism, are hardly living components. Carrying out the argument, he would contend that elsewhere in the body there exist such protoplasmic layers, from which grow the tissues composing the various organs—layers which alone remain fully alive, while the structures evolved from them lose their vitality in proportion as they are specialized. Instancing cartilage, tendon, and connective tissue, as showing in conspicuous ways this low vitality. From all which he would draw the inference that though the body forms a coherent whole, its essential units, taken by themselves, form a whole which is coherent only throughout the protoplasmic layers.

And then would follow the argument that the social organism, rightly conceived, is much less discontinuous than it seems. He would contend that as, in the individual organism, we include with the fully living parts, the less living and not living parts which co-operate in the total activities; so, in the social organism, we must include not only those most highly vitalized units, the human beings, who chiefly determine its phenomena, but also the various kinds of domestic animals, lower in the scale of life, which under the control of man co-operate with him, and even those far inferior structures the plants, which, propagated by human agency, supply materials for animal and human activities. In defence of this view he would point out how largely these lower classes of organisms, co-existing with men in societies, affect the structures and activities of the societies—how the traits of the pastoral type depend on the natures of the creatures reared, and how in settled societies the plants producing food, materials for textile

fabrics, etc , determine certain kinds of social arrangements and actions. After which he might insist that since the physical characters, mental natures, and daily activities, of the human units, are, in part, moulded by relations to these animals and vegetals, which, living by their aid, and aiding them to live, enter so much into social life as even to be cared for by legislation, these lower living things cannot rightly be excluded from the conception of the social organism. Hence would come his conclusion that when, with human beings, are incorporated the less vitalized beings, animal and vegetal, covering the surface occupied by the society, an aggregate results having a continuity of parts, more nearly approaching to that of an individual organism , and which is also like it in being composed of local aggregations of highly vitalized units, imbedded in a vast aggregation of units of various lower degrees of vitality, which are, in a sense, produced by, modified by, and arranged by, the higher units.

But without accepting this view, and admitting that the discreteness of the social organism stands in marked contrast with the concreteness of the individual organism, the objection may still be adequately met.

§ 221. Though coherence among its parts is a prerequisite to that co-operation by which the life of an individual organism is carried on ; and though the members of a social organism, not forming a concrete whole, cannot maintain co-operation by means of physical influences directly propagated from part to part ; yet they can and do maintain co-operation by another agency. Not in contact, they nevertheless affect one another through intervening spaces, both by emotional language, and by the language, oral and written, of the intellect. For carrying on mutually-dependent actions, it is requisite that impulses, adjusted in their kinds, amounts, and times, shall be conveyed from part to part. This requisite is fulfilled in living bodies by

molecular waves, that are indefinitely diffused in low types, and in high types are carried along definite channels (the function of which has been significantly called *inter-nuncial*). It is fulfilled in societies by the signs of feelings and thoughts, conveyed from person to person; at first in vague ways and only at short distances, but afterwards more definitely and at greater distances. That is to say, the inter-nuncial function, not achievable by stimuli physically transferred, is nevertheless achieved by language.

The mutual dependence of parts which constitutes organization is thus effectually established. Though discrete instead of concrete, the social aggregate is rendered a living whole.

§ 222 But now, on pursuing the course of thought opened by this objection and the answer to it, we arrive at an implied contrast of great significance—a contrast fundamentally affecting our idea of the ends to be achieved by social life.

Though the discreteness of a social organism does not prevent sub-division of functions and mutual dependence of parts, yet it does prevent that differentiation by which one part becomes an organ of feeling and thought, while other parts become insensitive. High animals of whatever class are distinguished from low ones by complex and well-integrated nervous systems. While in inferior types the minute scattered ganglia may be said to exist for the benefit of other structures, the concentrated ganglia in superior types are the structures for the benefit of which the rest may be said to exist. Though a developed nervous system so directs the actions of the whole body as to preserve its integrity; yet the welfare of the nervous system is the ultimate object of all these actions: damage to any other organ being serious only because it immediately or remotely entails that pain or loss of pleasure which the nervous system suffers. But the discreteness of a society negatives differentiations cal-

ried to this extreme. In an individual organism the minute living units, most of them permanently localized, growing up, working, reproducing, and dying away in their respective places, are in successive generations moulded to their respective functions, so that some become specially sentient and others entirely insentient. But it is otherwise in a social organism. The units of this, out of contact and much less rigidly held in their relative positions, cannot be so much differentiated as to become feelingless units and units which monopolize feeling. There are, indeed, slight traces of such a differentiation. Human beings are unlike in the amounts of sensation and emotion producible in them by like causes here great callousness, here great susceptibility, is characteristic. In the same society, even where its members are of the same race, and still more where its members are of dominant and subject races, there exists a contrast of this kind. The mechanically-working and hard-living units are less sensitive than the mentally-working and more protected units. But while the regulative structures of the social organism tend, like those of the individual organism, to become seats of feeling, the tendency is checked by this want of physical cohesion which brings fixity of function, and it is also checked by the continued need for feeling in the mechanically-working units for the due discharge of their functions.

Hence, then, a cardinal difference in the two kinds of organisms. In the one, consciousness is concentrated in a small part of the aggregate. In the other, it is diffused throughout the aggregate: all the units possess the capacities for happiness and misery, if not in equal degrees, still in degrees that approximate. As, then, there is no social sensorium, it results that the welfare of the aggregate, considered apart from that of the units, is not an end to be sought. The society exists for the benefit of its members; not its members for the benefit of the society. It has ever

to be remembered that great as may be the efforts made for the prosperity of the body politic, yet the claims of the body politic are nothing in themselves, and become something only in so far as they embody the claims of its component individuals

§ 223. From this last consideration, which is a digression rather than a part of the argument, let us now return and sum up the various reasons for regarding a society as an organism.

It undergoes continuous growth; as it grows, its parts, becoming unlike, exhibit increase of structure, the unlike parts simultaneously assume activities of unlike kinds, these activities are not simply different, but their differences are so related as to make one another possible; the reciprocal aid thus given causes mutual dependence of the parts; and the mutually-dependent parts, living by and for one another, form an aggregate constituted on the same general principle as an individual organism. The analogy of a society to an organism becomes still clearer on learning that every organism of appreciable size is a society, and on further learning that in both, the lives of the units continue for some time if the life of the aggregate is suddenly arrested, while if the aggregate is not destroyed by violence its life greatly exceeds in duration the lives of its units. Though the two are contrasted as respectively discrete and concrete, and though there results a difference in the ends subserved by the organization, there does not result a difference in the laws of the organization the required mutual influences of the parts, not transmissible in a direct way, being transmitted in an indirect way.

Having thus considered in their most general forms the reasons for regarding a society as an organism, we are prepared for following out the comparison in detail. We shall find that the further we pursue it the closer does the analogy appear.

CHAPTER III.

SOCIAL GROWTH.

§ 224. SOCIETIES, like living bodies, begin as germs—originate from masses which are extremely minute in comparison with the masses some of them eventually reach. That out of small wandering hordes such as the lowest races now form, have arisen the largest societies, is a conclusion not to be contested. The implements of pre-historic peoples, ruder even than existing savages use, imply absence of those arts by which alone large aggregations of men are made possible. Religious ceremonies that survived among ancient historic races, pointed back to a time when the progenitors of those races had flint knives, and got fire by the friction of wood; and so must have lived in such small clusters as are alone possible before the rise of agriculture.

The implication is that by processes of integration, direct and indirect, there have in course of time been produced social aggregates a million times in size the aggregates which alone existed in the remote past. Here, then, is a growth reminding us, by its degree, of growth in living bodies.

§ 225. Between this trait of organic evolution and the answering trait of super-organic evolution, there is a further parallelism: the growths in aggregates of different classes are extremely various.

Glancing over the entire assemblage of animal types,

we see that the members of one large class, the *Protozoa*, scarcely ever increase beyond that microscopic size with which every higher animal begins. Among the multitudinous and varied *Cœlenterata*, the masses range from that of the small *Hydra* to that of the large *Medusa*. The annulose and mollusious types, respectively show us immense contrasts between their superior and inferior members. And vertebrate animals, much larger on the average than the rest, display among themselves enormous differences.

Kindred varieties of growth strike us when we contemplate the entire assemblage of human societies. Scattered over many regions there are minute hordes—still extant samples of the primordial type of society. We have *Wood-Veddahs* living sometimes in pairs, and only now and then assembling, we have *Bushmen* wandering about in families and forming larger groups but occasionally; we have *Fuegians* clustered by the dozen or the score. Tribes of *Australians*, of *Tasmanians*, of *Andamanese*, are variable within the limits of perhaps twenty to fifty. And similarly, if the region is inhospitable, as with the *Esquimaux*, or if the arts of life are undeveloped, as with the *Digger-Indians*, or if adjacent higher races are obstacles to growth, as with *Indian Hill-tribes* like the *Juangs*, this limitation to primitive size continues. Where a fruitful soil affords much food, and where a more settled life, leading to agriculture, again increases the supply of food, we meet with larger social aggregates instance those in the *Polynesian Islands* and in many parts of *Africa*. Here a hundred or two, here several thousands, here many thousands, are held together more or less completely in one mass. And then in the highest societies instead of partially-aggregated thousands we have completely-aggregated millions.

§ 226. The growths of individual and social organisms are allied in another respect. In each case size augments by

two processes, which go on sometimes separately, sometimes together. There is increase by simple multiplication of units, causing enlargement of the group; there is increase by union of groups, and again by union of groups of groups. The first parallelism is too simple to need illustration; but the facts which show us the second must be set forth.

Organic integration, treated of at length in the *Principles of Biology*, §§ 180—211, must be here summarized to make the comparison intelligible. The compounding and re-compounding as shown us throughout the vegetal kingdom, may be taken first, as most easily followed.

Plants of the lowest orders are minute cells, some kinds of which in their myriads colour stagnant waters, and others compose green films on damp surfaces. By clustering of such cells are formed small threads, discs, globes, etc., as well as amorphous masses and laminated masses. One of these last, called a thallus when scarcely at all differentiated, as in a seaweed, and a frond in cryptogams that have some structure, is an extensive but simple group of the protophytes first named. Temporarily united in certain low cryptogams, fronds become permanently united in higher cryptogams, then forming a series of foliar surfaces joined by a creeping stem. Out of this comes the phænogamic axis—a shoot with its foliar organs or leaves. That is to say, there is now a permanent cluster of clusters. And then, as these axes develop lateral axes, and as these again branch, the compounding advances to higher stages.

In the animal-kingdom the like happens, though in a less regular and more disguised manner. The smallest animal, like the smallest plant, is a minute group of living molecules or physiological units. There are many forms and stages showing us the clustering of these smallest animals. Sometimes, as in the compound *Forficellæ* and in the Sponges, their individualities are scarcely at all masked, but as evolution of the composite aggregate advances, the individualities of the compo-

nent aggregates become less distinct. In some *Cœlenterata*, though they retain considerable independence, which they show by moving about like *Amœbæ* when separated, they have their individualities mainly merged in that of the aggregate formed of them—instance the common Hydra. Tertiary aggregates similarly result from the massing of secondary ones. Sundry modes and phases of the process are observable among cœlenterate types. There is the branched hydroid, in which the individual polypes preserve their identities, and the polypidom merely holds them together; and there are forms, such as *Velella*, in which the polypes have been so modified and fused, that their individualities were long unrecognized. Again, among the *Molluscoida* we have feebly-united tertiary aggregates in the *Salpidae*; while we have, in the *Botryllidae*, masses in which the tertiary aggregate, greatly consolidated, obscures the individualities of the secondary aggregates. So, too, is it with certain annuloid types, and, as I have endeavoured to show, with the *Annulosa* generally. (*Prin. of Biol.*, § 205.)

Social growth proceeds by an analogous compounding and re-compounding. The primitive social group, like the primitive group of physiological units with which organic evolution begins, never attains any considerable size by simple increase. Where, as among Fuegians, the supplies of wild food yielded by an inclement habitat will not enable more than a score or so to live in the same place—where, as among Andamanese, limited to a strip of shore backed by impenetrable bush, forty individuals is about the number that can find prey without going too far from their temporary abode—where, as among Bushmen, wandering over barren tracts, small hordes are alone possible, and even families “are sometimes obliged to separate, since the same spot will not afford sufficient sustenance for all,” we have extreme instances of the necessary limitation of simple groups, and the necessary formation of migrating groups when the limit is passed. Even in tolerably pro-

ductive habitats, fission of the groups is eventually necessitated in a kindred manner. Spreading as its number increases, a primitive tribe presently reaches a diffusion at which its parts become incoherent; and it then gradually separates into tribes that become distinct as fast as their continually-diverging dialects pass into different languages. Frequently nothing further happens than repetition of this. Conflicts of tribes, dwindling or extinction of some, growths and spontaneous divisions of others, continue. The formation of a larger society results only by combination of these smaller societies; which occurs without obliterating the divisions previously caused by separations. This process may be seen now going on among various uncivilized races, as it once went on among the ancestors of the civilized races. Instead of absolute independence of small hordes, such as the lowest savages show us, more advanced savages show us slight cohesions among larger hordes. In North America each of the three great tribes of Comanches consists of various bands, having such feeble combination only, as results from the personal character of the great chief. So of the Dakotahs there are, according to Burton, seven principal bands, each including minor bands, numbering altogether, according to Catlin, forty-two, and in like manner the five Iroquois nations had severally eight tribes. Closer unions of these slightly-coherent original groups, arise under favourable conditions, but only now and then become permanent. A common form of the process is that described by Mason as occurring among the Karens. "Each village, with its scant domain, is an independent state, and every chief a prince; but now and then, a little Napoleon arises, who subdues a kingdom to himself, and builds up an empire. The dynasties, however, last only with the controlling mind." The like happens in Africa. Livingstone says—"Formerly all the Maganja were united under the government of their great Chief, Undi; * * * but after Undi's death it fell to pieces. * * * This has been the

inevitable fate of every African Empire from time immemorial." Only occasionally do there result compound social aggregates that endure for considerable periods, as Dahomey, or as Ashantee, which is "an assemblage of states owing a kind of feudal obedience to the sovereign" The histories of Madagascar and of various Polynesian islands also display these transitory compound groups, out of which at length come in some cases permanent ones In the earliest times of the extinct civilized races, like stages were passed through. In the words of Maspero, Egypt was "divided at first into a great number of tribes, which at several points simultaneously began to establish small independent states, every one of which had its laws and its worship" The compound groups of Greeks first formed, were those minor ones resulting from the subjugation of weaker towns by stronger neighbouring ones. And in Northern Europe during pagan times, the numerous German tribes, each with its cantonal divisions, illustrated this second stage of aggregation.

After such compound societies are consolidated, repetition of the process on a larger scale produces doubly-compound societies, which, usually cohering but feebly, become in some cases quite coherent. Maspero infers that the Egyptian states described above as resulting from integration of tribes, were swallowed up into two great principalities, Upper Egypt and Lower Egypt, which were eventually united the small states becoming provinces. The boasting records of Mesopotamian kings similarly show us this union of unions going on. So, too, in Greece the integration previously displayed locally, began afterwards to combine all the minor societies into two confederacies. Before and after the Christian era, the like happened throughout Northern Europe. During Roman days there arose for defensive purposes federations of tribes which eventually consolidated; and subsequently these were compounded into still larger aggregates. Then

came, in later times, as is well illustrated by French history, a massing of small feudal territories into provinces and a subsequent massing of these into kingdoms.

So that in both organic and super-organic growth, we see a process of compounding and re-compounding carried to various stages. In both cases, after some consolidation of the smallest aggregates there comes the process of forming larger aggregates by union of them; and in both cases repetition of this process makes secondary aggregates into tertiary ones.

§ 227. Organic growth and super-organic growth have yet another analogy. As above said, increase by multiplication of individuals in a group, and increase by union of groups, may go on simultaneously, and it does this in both cases.

The original clusters, animal and social, are not only small, but they lack density. Creatures of low types occupy large spaces considering the quantities of animal substance they contain, and low-type societies spread over areas that are wide relatively to the numbers of their component individuals. But as integration in animals is shown by concentration as well as by bulkiness, so that social integration that results from the clustering of clusters, is joined with augmentation of the number contained by each cluster. If we contrast the populousness of regions inhabited by wild tribes with the populousness of equal regions in Europe; or if we contrast the density of population in England under the Heptarchy with its present density; we see that besides the growth produced by union of groups there has gone on interstitial growth. Just as the higher animal has become not only larger than the lower but more solid; so, too, has the higher society.

Social growth, then, equally with the growth of a living body, shows us the fundamental trait of evolution under a twofold aspect. Integration is displayed both in the forma-

tion of a larger mass, and in the progress of such mass towards that coherence due to closeness of parts.

It is proper to add, however, that there is a mode of social growth to which organic growth affords no parallel—that caused by the migration of units from one society to another. Among many primitive groups and a few developed ones, this is a considerable factor; but, generally, its effect bears so small a ratio to the effects of growth by increase of population and coalescence of groups, that it does not much qualify the analogy.

CHAPTER IV.

SOCIAL STRUCTURES.

§ 228 IN societies, as in living bodies, increase of mass is habitually accompanied by increase of structure. Along with that integration which is the primary trait of evolution, both exhibit in a high degree the secondary trait, differentiation.

The association of these two characters in animals was described in the *Principles of Biology*, § 44. Excluding certain low kinds of them whose activities are little above those of plants, we recognized the general law that large aggregates have high organizations. The qualifications of this law which go along with differences of medium, of habitat, of type, are numerous; but when made they leave intact the truth that for carrying on the combined life of a great mass, complex arrangements are required. So, too, is it with societies. As we progress from the smallest groups to larger; from simple groups to compound groups; from compound groups to doubly compound ones; the unlikenesses of parts increase. The social mass, homogeneous when minute, habitually gains in heterogeneity along with each increment of growth; and to reach great size must acquire great heterogeneity. Let us glance at the leading stages.

Naturally in a state like that of the Cayaguas or Wood-Indians of South America, so little social that "one family

lives at a distance from another," social organization is impossible, and even where there is some slight association of families, organization does not establish itself while they are few and wandering. Groups of Esquimaux, of Australians, of Bushmen, of Fuegians, are without even that primary contrast of parts implied by settled chieftainship. Their members are subject to no control but such as is temporarily acquired by the stronger, or more cunning, or more experienced. not even a nucleus is present. Habitually where larger simple groups exist, we find some kind of head. Though not a uniform rule (for, as we shall hereafter see, the genesis of a controlling agency depends on the nature of the social activities), this is a general rule. The headless clusters, wholly ungoverned, are incoherent, and separate before they acquire considerable sizes, but along with maintenance of an aggregate approaching to, or exceeding, a hundred, we ordinarily find a simple or compound ruling agency—one or more men claiming and exercising authority that is natural, or supernatural, or both. This is the first social differentiation.

Soon after it there frequently comes another, tending to form a division between regulative and operative parts. In the lowest tribes this is rudely represented only by the contrast between the relative positions and functions of the two sexes: the men, having unchecked control, carry on such external actions as the tribe shows us, chiefly in war, while the women are made subject drudges who perform the less skilled parts of the process of sustentation. But that tribal growth and development of chieftainship which gives military superiority, presently results in enlargement of the operative part by the addition of captives. This begins unobtrusively. While in battle the men are killed and often eaten, the non-combatants are enslaved. the Patagonians, for example, make slaves of women and children taken in war. Later, and especially when cannibalism ceases, comes the enslavement of male captives; whence results, in some cases, an

operative part clearly marked off from the regulative part. Among the Chinooks, Ross tells us that "slaves do all the laborious work" We read that the Beluchi, avoiding the hard labour of cultivation, impose it upon the Jutts, the ancient inhabitants whom they have subjugated. According to Beecham, it is usual on the Gold Coast to make the slaves clear the ground for cultivation. And by the Felatahs, "the male slaves are employed in the various trades of building, working in iron, weaving, making shoes or clothes, and in traffic, the female slaves in spinning, baking, and selling water in the streets."

Along with that increase of mass caused by union of primary social aggregates into secondary ones, a further unlikeness of parts begins to arise. The holding together of the compound cluster implies a head of the whole as well as heads of the parts; and a differentiation analogous to that which originally produced a chief, now produces a chief of chiefs. Sometimes the combination is made for defence against a common foe, and sometimes it results from conquest by one tribe of the rest. In this last case the predominant tribe, in the maintenance of its supremacy, develops more highly its military character, so becoming unlike the others.

How after such clusters of clusters have been so consolidated that their united powers can be wielded by one governing agency, there come alliances with, or subjugations of, other such compound clusters, ending from time to time in coalescence—how when this happens there results still greater complexity in the governing agency, with its king, local rulers, and petty chiefs—how, at the same time, there arise more marked divisions of classes—military, priestly, slave, etc., it needs not to point out more specifically. That complication of structure accompanies increase of mass, is sufficiently obvious.

§ 229. This increase of heterogeneity, which in both

classes of aggregates goes along with growth, presents another trait in common. Beyond unlikenesses of parts resulting from development of the co-ordinating agencies, there presently follow unlikenesses among the agencies co-ordinated—the organs of alimentation, etc., in the one case, and the industrial organs in the other.

When animal-aggregates of the lowest order unite to form one of a higher order, and when, again, these secondary aggregates are compounded into tertiary aggregates, each component is at first similar in structure to the other components; but in the course of evolution dissimilarities arise and become more and more decided. Among the *Cœlenterata* the stages are clearly indicated. From the sides of the common hydra, bud out young ones which, when they have fully developed, separate from the parent. In the compound hydroids the young polypes produced in like manner, remain permanently attached, and, themselves repeating the process, presently form a branched aggregate. When the members of the compound group lead similar and almost independent lives, as in various rooted genera, they remain similar save those of them which become reproductive organs. But in the floating and swimming clusters, formed by a kindred process, the differently-conditioned members have become different, while assuming different kinds of activities or functions. It is thus with the minor social groups combined into a major social group. Each tribe, originally self-sufficing, had within itself such feebly-marked industrial structures as sufficed for its low type of life; and these were like those of each other tribe. But union of them greatly facilitates exchange of commodities, and if, as mostly happens, the component tribes severally occupy localities favourable to different kinds of production, different industrial actions are initiated, and there result differences of industrial structures. Even between tribes not united, as those of Australia, there is barter of products furnished by their

respective habitats: so long, of course, as they are not at war. And evidently where there is reached such a stage of integration as in Madagascar, or as in the chief Negro states of Africa, the internal peace that follows subordination to one government, makes commercial intercourse easy. The like parts, being permanently held together, mutual dependence becomes possible, and along with growing mutual dependence there goes growing unlikeness of parts.

§ 230. The advance of organization which thus follows the advance of aggregation, alike in individual organisms and in social organisms, conforms in both cases to the same general law differentiations proceed from the more general to the more special. First broad and simple contrasts of parts, then within each of the parts thus primarily contrasted, changes which make unlike divisions of them; then within each of these unlike sub-divisions minor unlikenesses, and so on continually.

The successive stages in the development of a vertebrate column, serve to illustrate this law in animals. At the outset an elongated depression of the blastoderm, called the "primitive groove," represents the entire cerebro-spinal canal as yet there are no marks of vertebræ, nor even a contrast between the part which is to become head and the part which is to become back-bone. Presently the ridges bounding this groove, growing up and folding over more rapidly at the anterior end, which at the same time widens, begin to make the skull distinguishable from the spine; and the commencement of segmentation in the spinal part, while the cephalic part remains unsegmented, strengthens the contrast. Within each of these main divisions minor divisions soon arise. The rudimentary cranium, bending forwards upon itself, simultaneously acquires three dilations indicating the contained nervous structures, while the segmentation of the spinal column, spreading to its ends, produces an almost-uniform series of "proto-

vertebræ." At first these proto-vertebræ not only differ little from one another, but each is relatively simple—a quadrate mass. Gradually this almost-uniform series falls into unlike divisions—the cervical group, the dorsal group, the lumbar group, and while the series of vertebræ is thus becoming specialized in its different regions, each vertebra is changing from that general form which it at first had in common with the rest, to the more special form eventually distinguishing it from the rest. In all parts of the embryo there are, at the same time, going on kindred processes, which, first making each large part unlike all other parts, then make the parts of that part unlike one another.

In social evolution analogous metamorphoses may be everywhere traced. The rise of the structure exercising religious control may be taken as an example. In simple tribes, and in clusters of tribes during their early stages of aggregation, we find men who are at once sorcerers, priests, diviners, exorcists, doctors,—men who deal with supposed supernatural beings in all the various possible ways. propitiating them, seeking knowledge and aid from them, commanding them, subduing them. Along with advance in social integration, there come both differences of function and differences of rank. In Tanna "there is a rain-making class of priests", in Fiji there are not only priests, but seers, among the Sandwich Islanders there are diviners as well as priests, among the New Zealanders, Thomson distinguishes between priests and sorcerers; and among the Kaffirs, besides the diviners and rain-makers, there are two classes of doctors who respectively rely on supernatural and on natural agents in curing their patients. More advanced societies, as those of Ancient America, show us still greater multiformity of this originally-uniform social structure. In Mexico, for example, the medical class, descending from a class of sorcerers who dealt antagonistically with the supernatural agents supposed to cause disease, were distinct from the priests,

whose dealings with supernatural agents were propitiatory. Further, within the priest-class there were different orders, dividing the religious offices among them—sacrificers, diviners, singers, composers of hymns, instructors of youth, etc ; and then there were also gradations of rank among priests. This progress from general to special in priest-hoods, has, in the higher nations, led to such marked distinctions that the original kinships are forgotten. The priest-astrologers of ancient races were initiators of the scientific class, now variously specialized, from the priest-doctors of old have come the medical class with its chief division and minor divisions, while within the clerical class proper, have arisen not only various ranks from Pope down to acolyte, but various kinds of functionaries—priest, deacon, chorister, exorcist, etc., as well as the many kinds of monks and nuns. Similarly if we trace the genesis of any industrial structure; as that which from primitive blacksmiths who smelt their own iron as well as make implements from it, brings us to our iron-manufacturing districts, where preparation of the metal is separated into smelting, refining, puddling, rolling, and where turning this metal into implements is divided into various businesses carried on in many kinds of factories.

The transformation here illustrated, is, indeed, an aspect of that transformation of the homogeneous into the heterogeneous which everywhere characterizes evolution ; but the truth to be noted is that it characterizes the evolution of individual organisms and of social organisms in especially high degrees

§ 231. Closer study of the facts shows us another striking parallelism. Organs in animals and organs in societies have internal arrangements framed on the same principle.

Differing from one another as the viscera of a living creature do in many respects, they all have several traits in common. Each viscus contains appliances for conveying

nutriment through it, for bringing it materials on which to operate, for carrying away the product, for draining off waste matters, as also for increasing and diminishing its activity. Though liver and kidneys are widely unlike in general appearance and minute structure, as well as in the offices they fulfil, the one as much as the other has a system of arteries, a system of veins, a system of lymphatics—has branched channels through which its excretions escape, and nerves for exciting and checking it. In large measure the like is true of those higher organs which, instead of preparing and purifying and distributing the blood, and the general life by carrying on external actions—the nervous and muscular organs. These, too, have their channels for bringing prepared materials, channels for drafting off vitiated materials, channels for carrying away effete matters; as also their controlling nerve cells and fibres. So that along with the many marked differences of structure there are these marked communities of structure.

It is the same in a society. The clustered citizens forming an organ which produces some commodity for national use, or which otherwise satisfies national wants, has within it subservient structures substantially like those of each other organ carrying on each other function. Be it a cotton-weaving district or a district where cutlery is made, it has a set of agencies which bring the raw material and a set of agencies which collect and send away the manufactured articles; it has an elaborate apparatus of major and minor channels through which the necessities of life are drafted out of the general stocks circulating through the kingdom, and brought home to the local workers and those who direct them; it has appliances, postal and other, for bringing those impulses by which the industry of the place is excited or checked; it has local controlling powers, political and ecclesiastical, by which order is maintained and healthful action furthered. So, too, when, from a district which secretes some commodity, we turn to a sea-port which absorbs and

sends out goods, we find the distributing and restraining agencies are mostly the same. Even where this social organ, instead of carrying on a material activity, has, like a university, the office of preparing certain classes of units for social functions of particular kinds, this general type of structure is repeated. the appliances for local sustentation and regulation, differing in some respects, are similar in essentials—there are like classes of distributors, like classes for civil control, and a specially-developed class for ecclesiastical control.

On observing that this community of structure among social organs, like the community of structure among organs in a living body, necessarily accompanies mutual dependence, we shall see even more clearly than hitherto, how great is the likeness of nature between individual organization and social organization.

§ 232. One more structural analogy must be named. The formation of organs in a living body proceeds in ways which we may distinguish as primary, secondary, and tertiary; and, paralleling them, there are primary, secondary, and tertiary ways in which social organs are formed. We will look at each of the three parallelisms by itself.

In animals of low types the secretion of bile is carried on not by a liver; but by separate cells scattered along in the wall of the intestine at one part. These cells individually perform their function of separating certain matters from the blood, and individually pour out the products. No organ, strictly so-called, exists, but only a number of units not yet aggregated into an organ. This is analogous to the incipient form of an industrial structure in a society. At first each worker carries on his occupation alone; and himself disposes of the product to the consumer. The arrangement still extant in our villages, where the cobbler at his own fireside makes and sells boots, and where the blacksmith single-handed does what iron-work is needed

by his neighbours, exemplifies the primitive type of every producing structure. Among savages slight differentiations arise from individual aptitudes. Even of the degraded Fuegians, Fitzroy tells us that "one becomes an adept with the spear; another with the sling, another with a bow and arrows." As like differences of skill among members of primitive tribes, cause some to become makers of special things, it results that necessarily the industrial organ begins as a social unit. Where, as among the Shasta Indians of California, "arrow-making is a distinct profession," it is clear that manipulative superiority being the cause of the differentiation, the worker is at first single. And during subsequent periods of growth, even in small settled communities, this type continues. The statement of Winterbottom, that among the Coast Negroes, "the most ingenious man in the village is usually the blacksmith, joiner, architect, and weaver," while it shows us how little industrial functions are differentiated, also shows us how completely individual is the structure: the implication being that as the society grows, it is by the addition of more such individuals, severally carrying on their occupations independently, that the additional demand is met.

By two simultaneous changes, the incipient secreting organ of an animal reaches that higher structure with which our next comparison may be made. The cells pass from a scattered cluster into a compact cluster, and they severally become compound. In place of a single cell elaborating and emitting its special product, we now have a small elongated sac containing a family of cells; and this, through an opening at one end, gives exit to their products. Hence results an integrated group of more or less tubular follicles, each containing secreting units and having its separate orifice of discharge. To this type of individual organ, we find, in semi-civilized societies, a type of social organ closely corresponding. In one of these settled and growing communities, the demands upon

individual workers, now more specialized in their occupations, have become regular; and each worker, occasionally pressed by work, makes helpers of his children. This practice, beginning incidentally, gradually establishes itself; and eventually it grows into a law of the community that each man shall bring up his family to his own trade. Illustrations of this stage are numerous. Skilled occupations, Prescott says, "like every other calling and office in Peru, always descended from father to son. The division of castes, in this particular, was as precise as that which existed in Egypt or Hindustan." In Mexico too, according to Clavigero, "the sons in general learned the trades of their fathers, and embraced their professions." The like was true of the industrial structures of European nations in early times. By the Theodosian code, a Roman youth "was compelled to follow the employment of his father * * * and the suitor who sought the hand of the daughter could only obtain his bride by becoming wedded to the calling of her family." In mediæval France handicrafts were inherited; and the old English periods were characterized by a like custom. Branching of the family through generations into a number of kindred families carrying on the same occupation, produced the germ of the guild; and the related families who monopolized each industry formed a cluster habitually occupying the same quarter. Hence the still extant names of many streets in English towns—"Fellmonger, Horsemonger, and Fleshmonger, Shoewright and Shieldwright, Turner and Salter Streets, and the like." And now, on observing how one of these industrial quarters was composed of many allied families, each containing sons working under direction of a father, who while sharing in the work sold the produce, and who, if the family and business were large, became mainly a channel taking in raw material and giving out the manufactured article, we see that there existed an analogy to the kind of glandular organ

described above, which consists of a number of adjacent cell-containing follicles having separate mouths.

A third stage the analogy may be traced. Along with that increase of a glandular organ necessitated by the more active functions of a more developed animal, there goes a change of structure consequent on augmentation of bulk. If the follicles multiply while their ducts have all to be brought to one spot, it results that their orifices, increasingly numerous, occupy a larger area of the wall of the cavity which receives the discharge; and if lateral extension of this area is negatived by the functional requirements, it results that the needful area is gained by formation of a cœcum. Further need of the same kind leads to secondary cœca diverging from this main cœcum, which hence becomes in part a duct. Thus is at length evolved a large viscus, such as a liver, having a single main duct with ramifying branches running throughout its mass.

Now we pass from the above-described kind of industrial organ by parallel stages to a higher kind. There is no sudden leap from the household type to the factory type, but a gradual transition. The first step is shown us in those rules of trade-guilds under which, to the members of the family, might be added an apprentice (possibly at first a relation), who, as Brentano says, "became a member of the family of his master, who instructed him in his trade, and who, like a father, had to watch over his morals, as well as his work": practically, an adopted son. This modification having been initiated, there followed the employing of apprentices who had changed into journeymen. With the development of this modified household-group, the master grew into a seller of goods made, not by his own family only, but by others; and with the enlargement of his business necessarily ceased to be a worker and became wholly a distributor—a channel through which went out the products, not of a few sons, but of many unrelated artizans. This led the way to establishments in which the employed far outnumbered the

members of the family, until at length, with the use of mechanical power, came the factory: a series of stories, severally containing a crowd of producing units, and sending out tributary streams of product that join before reaching the single place of exit. Finally, in greatly-developed industrial organs, such as those yielding textile fabrics, arise many factories clustered in the same town, and others in adjacent towns, to and from which, along branching roads, come the raw material and go the bales of cloth, calico, etc

There are instances in which a new industry passes through these stages in the course of a few generations; as happened with the stocking manufacture. In the Midland counties, fifty years ago, the rattle and burr of a solitary stocking-frame came from a road-side cottage every here and there: the single worker made and sold his product. Presently arose work-shops in which several such looms might be heard going: there was the father and his sons, with perhaps a journeyman. At length grew up the large building containing many looms driven by a steam-engine; and at last many such large buildings in the same town.

§ 233. These structural analogies reach a final phase that is still more striking. In both cases there is a contrast between the original mode of development and a substituted later mode.

In the general course of organic evolution from low types to high, there have been passed through by insensible modifications all the stages above described; but now, in the individual evolution of an organism of high type, these stages are greatly abridged, and an organ is produced by a comparatively direct process. Thus the liver of a mammalian embryo is formed by the accumulation of numerous cells, which presently grow into a mass projecting from the wall of the intestine; while simultaneously there dips down into it a cœcum from the intestine. Transformation of this cœcum into the hepatic duct takes place at

the same time that within the mass of cells there arise minor ducts, connected with this main duct; and there are meanwhile going on other changes which, during the evolution of the organ in successively higher types, came one after another.

In the formation of industrial organs the like happens. Now that the factory form of structure is well-established—now that it has become ingrained in the social constitution, we see direct assumptions of it in all industries for which its adaptation has been shown. If at one place the discovery of ore prompts the setting up of iron-works, or at another a fit kind of water facilitates brewing, there is no passing through the early stages of the single worker, the family, the clustered families, etc.; but there is a sudden drafting of materials and men to the spot, and a rapid formation of a producing structure on the advanced type. Nay, not the single large establishment only is thus evolved after the direct manner, but a whole cluster of large establishments. Such a case as that of Barrow shows us a town with its great iron-works, its vast importing and exporting establishments, its large docks and means of communication, all in the space of a few years framed after that type which it has taken many centuries to develop through successive modifications.

An allied but even more marked change in the evolutionary process, is also common to both cases. Just as in the embryo of a high animal, various organs have their important parts laid down out of their original order, in anticipation, as it were, so, with the body at large, it happens that entire organs which, during the serial genesis of the type, came comparatively late, come in the evolving individual comparatively soon. This, which Prof. Haeckel has called heterochrony, is shown us in the early marking out of the brain in a mammalian embryo, though in the lowest vertebrate animal, no brain ever exists, or, again, in the segmentation of the spinal column before any alimen-

tary system is formed, though, in a proto-vertebrate, even when its alimentary system is completed, there are but feeble signs of that segmentation from which a vertebrate axis may follow.

The analogous change of order in social evolution, is shown us by new societies which inherit the confirmed habits of old ones. Instance the United States, where a town in the far west, laid down in its streets and plots, has its hotel, church, post-office, built while there are but few houses; and where a line of railway is run through the wilderness in anticipation of settlements. Or instance Australia, where but a few years after the huts of gold diggers begin to cluster round some new mines, there is established a printing-office and journal; though, in the mother-country, centuries passed before a town of like size developed a like agency.

CHAPTER V.

SOCIAL FUNCTIONS.

§ 234. CHANGES of structures cannot occur without changes of functions. Much that was said in the last chapter might, therefore, be said here with substituted terms. Indeed, as in societies many changes of structure are more indicated by changes of function than directly seen, it may be said that these last have been already described by implication.

There are, however, certain functional traits not manifestly implied by traits of structure. To these we may devote a few pages.

§ 235. If organization consists in such a construction of the whole that its parts can carry on mutually-dependent actions, then in proportion as organization is slight, the parts must be comparatively independent of one another; while, conversely, along with high organization must go a dependence of each part upon the rest so great that separation is fatal. This truth is equally well shown us in the individual organism and in the social organism.

The lowest animal-aggregates are so constituted that each portion, like every other in appearance, carries on like actions; and here spontaneous or artificial separation interferes scarcely at all with the life of either part. When the faintly-differentiated speck of protoplasm forming a

Rhizopod is accidentally divided, each division goes on as before. So, too, with those aggregates of the second order in which the components remain substantially alike. The ciliated monads clothing the horny fibres of a living sponge, need one another's aid so little that, when the sponge is cut in two, each half carries on its processes without interruption. Even where some unlikeness has arisen among the units, as in the familiar polype, the perturbation caused by division is but temporary. The two or more portions resulting, need only a little time for the units to rearrange themselves into the fit forms before resuming their ordinary simple actions.

The like happens for the like reason with the lowest social aggregates. A headless wandering group of primitive men divides without any inconvenience. Each man, at once warrior, hunter, and maker of his own weapons, hut, etc., with squaw who has in every case the like drudgeries to carry on, needs concert with his fellows only in war and to some extent in the chase; and, except for fighting, concert with half the tribe is as good as concert with the whole. Even where the slight differentiation implied by chieftainship exists, little inconvenience results from voluntary or enforced separation. Either before or after a part of the tribe migrates, some man becomes head, and such low social life as is possible recommences.

With highly-organized aggregates of either kind it is very different. We cannot cut a mammal in two without causing immediate death. Twisting off the head of a fowl is fatal. Not even a reptile, though it may survive the loss of its tail, can live when its body is divided. And among annulose creatures it similarly happens that though in some inferior genera, bisection does not kill either half, it kills both in an insect, an arachnid, or a crustacean. If in high societies the effect of mutilation is less, still it is great. Middlesex separated from its surroundings would in a few days have all its social processes stopped

by lack of supplies. Cut off the cotton-district from Liverpool and other ports, and there would come arrest of its industry followed by mortality of its people. Let a division be made between the coal-mining populations and adjacent populations which smelt metals or make broadcloth by machinery, and both, forthwith dying socially by arrest of their actions, would begin to die individually. Though when a civilized society is so divided that part of it is left without a central controlling agency, it may presently evolve one; yet there is meanwhile much risk of dissolution, and before re-organization is tolerably efficient, a long period of disorder and weakness must be passed through.

So that the consensus of functions becomes closer as the evolution advances. In low aggregates, both individual and social, the actions of the parts are but little dependent on one another; whereas in developed aggregates of both kinds, that combination of actions which constitutes the life of the whole, makes possible the component actions which constitute the lives of the parts.

§ 236. Another corollary, manifest *à priori* and proved *à posteriori*, must be named. Where parts are little differentiated, they can, with comparative facility, perform one another's functions; but where much differentiated they can perform one another's functions very imperfectly, or not at all.

Again the common polype furnishes a clear illustration. One of these sack-shaped creatures admits of being turned inside out, so that the skin becomes stomach and the stomach becomes skin: each thereupon beginning to do the work of the other. The higher we rise in the scale of organization the less practicable do we find such exchanges. Still, to a small extent, substitutions of functions remain possible in the most developed creatures. Even in man the skin shows a trace of its original absorptive power, now monopolized by the alimentary canal: it takes into the system

certain small amounts of matters rubbed on to it. Such vicarious actions are, however, most manifest between parts having functions that are still allied. If, for instance, escape of the bile separated by the liver is impeded, other excretory organs, the kidneys and the skin, become channels through which bile is got rid of. If a cancer in the cesophagus prevents swallowing, the arrested food, dilating the cesophagus, forms a pouch in which imperfect digestion is set up. But these small abilities of the differentiated parts to discharge one another's duties, are not displayed where the structures and functions have diverged more widely. Though mucous membrane, continuous with skin at various orifices, will, if everted, assume to a considerable extent the characters and powers of skin, yet serous membrane will not; nor can bone or muscle undertake, for any of the viscera, portions of their functions if they fail.

In social organisms, low and high, we find these relatively great and relatively small powers of substitution. Of course, where each member of the tribe repeats every other in his mode of life, there are no unlike functions to be exchanged; and where there has arisen only that small differentiation implied by the barter of weapons for other articles, between one member of the tribe skilled in weapon-making and others who are less skilled, the destruction of this specially-skilled member entails no great evil; since the rest can severally do for themselves that which he did for them, though not quite so well. Even in settled societies of considerable size, we find the like holds to a great degree. Of the ancient Mexicans Zurita says—"Every Indian knows all handicrafts which do not require great skill or subtle utensils;" and Prescott affirms that in Peru each man "was expected to be acquainted with the various handicrafts essential to domestic comfort." Here it is plain that the parts of the societies were so slightly differentiated in their occupations, that assumption of one another's occupations remained practicable. But in societies like our

own, specialized industrially and otherwise in high degrees, the actions of one part which fails in its function cannot be assumed by other parts. Even the relatively unskilled farm labourers would have their duties very inadequately performed by the urban population, were they to strike; and our iron manufactures would be almost stopped if their specially-trained artisans, refusing to work, had to be replaced by peasants or hands from cotton-factories. Still less could the higher functions, legislative, judicial, etc., be effectually performed by coal-miners and navvies.

Evidently the same reason for this contrast holds in the two cases. In proportion as the units forming any part of an individual organism are limited to one kind of action, as that of absorbing, or secreting, or contracting, or conveying an impulse, and become adapted to that action, they lose adaptation to other actions; and in the social organism the discipline or culture required for the effectual discharge of a special duty, implies diminished fitness for discharging the special duties of others.

§ 237. Beyond these two chief functional analogies between individual organisms and social organisms, that when they are little evolved, division or mutilation causes small inconvenience but when they are much evolved it causes great perturbation or death, and that in low types of either kind the parts can assume one another's functions but cannot in high types; sundry consequent functional analogies might be enlarged upon did space permit.

There is the truth that in both kinds of organisms the vitality increases in proportion as the functions become specialized. In either case, before there exist variously-adapted structures for the unlike actions, these are ill-performed; and in the absence of developed appliances for furthering it, the utilization of one another's services is but slight. But along with advance of organization, every part, more limited in its office, performs its office better; the

means of exchanging benefits become greater; each aids all and all aid each with increasing efficiency; and the total activity we call life, individual or national, augments.

Much, too, remains to be said about the parallelism between the changes by which the functions become specialized; but this, along with other parallelisms, will best be seen on following out, as we will now do, the evolution of the several great systems of organs, individual and social: considering their respective structural and functional traits together.

CHAPTER VI.

SYSTEMS OF ORGANS.

§ 237. THE hypothesis of evolution implies a truth that was established independently of it—the truth that all animals, however unlike they finally become, begin their developments in like ways. The first structural changes, once passed through in common by divergent types, are repeated in the early changes undergone by every new individual of each type. Admitting some exceptions, chiefly among parasites, this is recognized as a general law.

This common method of development among organisms, is a method which we may expect to find paralleled by some common method among social organisms, and our expectation will be verified.

§ 238. In *First Principles* (§§ 149—152) and in the *Principles of Biology* (§§ 287—9) were described the primary organic differentiations which arise in correspondence with the primary contrasts of conditions among the parts, as outer and inner. Neglecting earlier stages, let us pass to those which show us the resulting systems of organs in their simplest forms.

The aggregated units composing the lowest coelenterate animal, have become so arranged that there is an outer layer of them directly exposed to the surrounding medium with its inhabitants, and an inner layer lining the digestive cavity

directly exposed only to the food. From units of the outer layer are formed those tentacles by which small creatures are caught, and those thread-cells, as they are called, whence are ejected minute weapons against invading larger creatures; while by units of the inner layer is poured out the solvent which prepares the food for that absorption which they afterwards effect, both for their own sustentation and for the sustentation of the rest. Here we have in its first stage the fundamental distinction which pervades the animal kingdom, between the external parts which deal with environing existences—prey, enemies, etc.—and the internal parts which utilize for the benefit of the entire body the nutritious substances which the external parts have secured.

Among the higher *Cœlenterata* a complication occurs. In place of each single layer of units there is a double layer, and between the two double layers a space. This space, partially separate from the stomach in creatures of this type, becomes completely shut off in types above it. In these superior types the outer double layer forms the wall of the body; the inner double layer bounds the alimentary cavity; and the space between them, containing such nutritive matters as are absorbed, is the so-called peri-visceral sac. Though the above-described two simple layers with their intervening protoplasm, are but *analogous* to the outer and inner systems of higher animals, these two double layers, with the intervening cavity, are *homologous* with the outer and inner systems of higher animals. For in the course of evolution this outer double layer gives rise to the skeleton, the nervo-muscular system, the organs of sense, the protecting structures, etc.; while the inner double layer becomes the alimentary canal with its numerous appended organs, which almost monopolize the cavity of the body.

Early stages which are in principle analogous, occur in the evolution of social organisms. When from low tribes entirely undifferentiated, we pass to tribes next above them, we

find classes of masters and slaves—masters who, as warriors carry on the offensive and defensive activities of the tribe, and thus especially stand in relations to enviroing agencies; and slaves who carry on inner activities for the general sustentation, primarily of their masters and secondarily of themselves. Of course this unlikeness is at first vague. Where the tribe subsists mainly on wild animals, its dominant class, not only warriors but hunters, takes a large share in procuring food; and such few captives as are made by war, form a subject class which performs the less skilled and more laborious parts of the process of sustentation. But along with progress to the agricultural state, the differentiation becomes more appreciable. Though members of the dominant class superintending the labour of their slaves in the fields, sometimes join in it—though the smaller chiefs and even the greater chiefs occasionally do this, yet the subject-class is the one immediately in contact with the food-supply, and the dominant class, more remote from the food-supply, is becoming directive only, with respect to internal actions, while it is both executive and directive with respect to external actions, offensive and defensive. . . . A society thus composed of two strata in immediate contact, complicates by the rise of grades within each stratum. For small tribes the structure just described suffices; but where there are formed aggregates of tribes, necessarily having more developed governmental and defensive agencies, with accompanying more developed industrial agencies supporting them, the higher and lower strata severally begin to differentiate internally. The superior class, besides minor distinctions that arise locally, originates everywhere a supplementary class of personal adherents who are mostly also warriors; while the inferior class begins to separate into bond and free. Various of the Malayo-Polynesian societies show us this stage. Among the East Africans, the Congo people, the Coast Negroes, the Inland Negroes, we find the same general sub-division—the king with his relatives, the

chief-class, the common people, the slaves; of which the first two with their immediate dependents carry on the corporate actions of the society, and the second two those actions of relatively-separate kinds which yield it all the necessities of life.

§ 239. In both individual and social organisms, after the outer and inner systems have been marked off from one another, there begins to arise a third system, lying between the two and facilitating their co-operation. Mutual dependence of the primarily-contrasted parts, implies intermediation; and in proportion as they respectively develop, the apparatus for exchange of products and of influences must develop too. This we find it does.

In the low coelenterate animal first described, consisting of inner and outer layers with intervening protoplasm, the nutritive matter which members of the inner layer have absorbed from prey caught by members of the outer layer, is transmitted almost directly to these members of the outer layer. Not so, however, in the superior type. Between the double-layered body-wall and the double-layered alimentary cavity, there is now a partially-separate peri-visceral sac; and this serves as a reservoir for the digested matters from which the surrounding tissues take up their shares of prepared food. Here we have the rudiment of a distributing system. Higher in the animal series, as in *Mollusca*, this peri-visceral sac, quite shut off, has ramifications running through the body, carrying nutriment to its chief organs; and in the central part of the sac has arisen a contractile tube which, by its occasional pulses, causes irregular movements in the nutritive fluid. Further advances are shown by the gradual lengthening and branching of it, until dividing and sub-dividing it becomes a set of blood-vessels, while its central part becomes a heart. As fast as this change progresses, the nutriment taken up from the alimentary structures, is distributed by these vascular structures to the outer and

inner organs in proportion to their needs. Evidently this distributing system must arise between the two pre-existing systems, and it necessarily complicates and ramifies in proportion as the parts to which it carries materials become more remote, more numerous, and severally more complex.

The like happens in societies. The lowest types have no distributing systems—no roads or traders exist. The two original classes are in contact. And slaves possessed by a member of the dominant class, stand in such direct relation to him that the transfer of products takes place without an intervening agency; and each family being self-sufficing, there is no need for men to effect exchanges of products between families. Even after these two primary divisions become partially subdivided, we find that so long as the social aggregate is a congeries of tribes severally carrying on within themselves the needful productive activities, a distributive system is scarcely traceable—occasional assemblings for barter alone occur. But as progressing consolidation of such tribes makes possible the localization of industries, there begins to show itself a special appliance for transferring commodities; consisting now of single hawkers, now of travelling companies of traders, and growing with the formation of roads into an organized system of wholesale and retail distribution that spreads everywhere.

§ 240. There is, then, parallelism between these three great systems in the two kinds of organisms. Moreover, they arise in the social organism in the same order as in the individual organism; and for the same reasons.

A society lives by absorbing matters from the earth—the mineral matters used for buildings, fuel, etc., the vegetal matters raised on its surface for food and clothing, the animal matters elaborated from these with or without human regulation, and the lowest social stratum is the one through which these matters are taken up and delivered to those who pass them into the general current of commodities: the

higher part of this lowest stratum being that which in workshops and factories elaborates some of these materials before they go to consumers. Hence it is undeniable that the classes engaged in manual occupations play the same part in the function of social sustentation, as is played by the components of the alimentary surfaces in the sustentation of a living body.

No less certain is it that the entire class of men engaged in buying and selling commodities of all kinds, on large and small scales, and in sending them along channels gradually formed to all districts, towns, and individuals, so enabling them to make good the waste caused by action, are, along with those channels, fulfilling an office essentially like that fulfilled in a living body by the vascular system; which, to every organ and every unit of it, brings a current of nutritive matters proportionate to its activity.

And it is equally manifest that while in the living body, the brain, the organs of sense, and the limbs guided by them, distant in position from the alimentary surfaces, are fed through the tortuous channels of the vascular system; so the controlling parts of a society, most remote from the operative parts, have brought to them through courses of distribution often extremely indirect, the needful supplies of consumable articles.

That the order of evolution is necessarily the same in the two cases, is just as clear. In a creature that is both very small and very inactive, like a hydra, direct passage of nutriment from the inner layer to the outer layer by absorption suffices. But in proportion as the outer structures, becoming more active, expend more, simple absorption from adjacent tissues no longer meets the resulting waste; and in proportion as the mass becomes larger, and the parts which prepare nutriment consequently more remote from the parts which consume it, there arises the need for a means of transfer. Until the two original systems have been marked off from one another, this tertiary system has no func-

tion ; and when the two original systems arise, they cannot develop far without corresponding development of this tertiary system. In the evolution of the social organism we see the like. Where there exists only a class of masters and a class of slaves in direct contact with it, an appliance for transferring products has no place ; but a larger society with classes exercising various regulative functions, and with localities devoted to different industries, not only affords a place for a transferring system, but can grow and complicate only on condition that this transferring system makes proportionate advances.

And now, having observed the relations among these three great systems, we may trace out the evolution of each by itself.

CHAPTER VII.

THE SUSTAINING SYSTEM.

§ 241. THE parts carrying on alimentation in a living body and the parts carrying on productive industries in the body politic, constitute, in either case, a sustaining system : sustentation is the office they have in common. These parts are differentiated in conformity with certain laws which are common to individual organisms and social organisms ; and of these laws the most general is that which concerns localization of their divisions.

As a typical example of this localization in vegetal organisms, may be named the ordinary contrast between the underground parts and the above-ground parts—the first absorbing water and mineral constituents, and the last, by the aid of light, depriving the atmospheric carbonic acid of its carbon. That this distinction of functions is originally caused by the relations of the two parts to environing agents, is proved by the facts that if not covered with an opaque bark, the root-part, when above the surface, becomes green and decomposes carbonic acid, while, conversely, branches bent down and imbedded in the ground develop rootlets. That is to say the unlikeness of their conditions determines this difference between the nutritive actions which these two great divisions of the plant carry on for the good of the whole.

Among animals (with the exception of certain *entozoa* which, being immersed in nutritive mat-

ters, feed themselves through their outer surfaces) the outer surfaces take no share in the function of alimentation. As already shown, the primary differentiation, establishing in the external layers a monopoly of those activities which their position makes possible, establishes in the internal layers a monopoly of those activities by which the swallowed prey is utilized. Here we have to note how the general process of utilization is divided among parts of the alimentary canal, in conformity with their respective relations to nutritive matters. The course of evolution will be roughly conceived on recalling the antithesis between the uniform digestive tube with undivided function which an inferior creature possesses, and the multiform digestive apparatus, with great and small divisions of function, which a bird or mammal possesses. Secured in a solid form, the food has first to be triturated; and hence triturating appliances when formed, come at, or near, the beginning of the series of structures—teeth where they exist, or a gizzard where they do not. Crushed to pieces, the ingested substances must be further reduced before absorption can begin, and their presence in an incompletely broken down state, therefore throws on the succeeding portion of the alimentary canal the duty of completing the disintegration in a contractile sac, furnished with glands secreting solvent liquids. The pulp produced in this sac entails on the next part of the canal a different office. There can no longer be trituration, or dissolution of large fragments into minute shreds; and any further preparation must consist in the addition of secretions which fit the matters for absorption. Preparation being now completed, there remains nothing to do but take up what is prepared—the arrival at a certain part of the alimentary canal in an absorbable state determines in that part the absorbing function. And similarly, though indirectly, with the localization of the great appended glands (*Prin. of Bio*, § 298—9).

In the social organism localization of the various indus-

tries which jointly sustain the whole, is determined in an analogous manner. Primarily, the relations to different parts of the organic and inorganic environments, usually not alike over the whole area the society covers, initiate differences in the occupations carried on. And, secondarily, the nearness to districts which have had their industries thus fixed, fixes the positions of other industries which especially require their products.

The first of these localizations is traceable even among the semi-civilized. Jackson describes some of the Fiji Islands as famous for wooden implements, others for mats and baskets, others for pots and pigments—unlikenesses between the natural products of the islands being the causes; as also in Samoa, where Turner tells us net-making is “confined principally to the inland villages,” and ascribes this to “proximity to the raw material.” The slightly-advanced societies of Africa show us kindred differentiations, having kindred origins. In Loango, according to Proyart, “the sea-coasts are frequented by regular professed fishermen,” and there are also men who live near the sea and make salt by “evaporating sea-water over a fire.” Here local facilities manifestly fix these occupations; as they doubtless do in that Ashantee town which is devoted to pottery. The extinct societies of America had more numerous such instances. Lorenzana says—“An extensive commerce is carried on in this salt [saltpetre] by the Mexicans of Yxtapaluca and Yxtapalapa, which mean the places where salt, or *Yxtatl*, is gathered,” and when we read in Clavigero of the potters of Cholula, the stone-cutters of Tenajocan, the fishers of Cuiclahuac, and the florists of Xochimilco, we cannot doubt that these several businesses grew up in places which respectively furnished natural advantages for carrying them on. Of kindred evidence supplied by the Ancient Peruvians may be given Garcilasso’s statement that “the shoes were made in the provinces where aloes were most abundant, for they were made of the leaves of a tree called *maguay*. The arms also were supplied by

the provinces where the materials for making them were most abundant." By showing us the generality of the law, these instances give point to the evidence around us. Familiarity must not make us overlook the meaning of the facts that the population fringing our shores is, by virtue of its position, led into occupations directly or indirectly maritime—fishing, sailing, ship-building—while certain coast-towns are, by physical circumstances, differentiated into places of import and export; and that the inland population, cultivating more especially this or that kind of food as soil and climate determine, has its energies turned by proximity to the raw material, here to quarrying stone or slate, here to brick-making, and in other places to raising minerals.

Then, as above implied, there result the secondary localizations favoured by these. Where not drawn by natural advantages in the way of water-power, manufactures in general cluster in or around regions where abundance of coal makes steam-power cheap. And if two materials are needed, the localization is determined by them jointly; as with the nail-making industry at Stourbridge and the neighbourhood, where both iron and coal are close at hand; as in Birmingham, with its multifarious hardwares, which is similarly adjacent to the sources of these two chief raw materials; as in Manchester, which lies near the chief cotton port and on a coal region; as in Sheffield, which, besides the five streams yielding its water-power, and its adjacency to supplies of iron, coal, and charcoal, has at hand "the best grit in the world for grindstones."

§ 242. This localization of organs devoted to the preparation of those matters which the organism, individual or social, needs for sustentation, exhibits a further common trait. The alimentary structures, responding to requirements of another kind, differentiate and develop in a manner quite unlike that followed by the regulating structures.

The common trait referred to is most visible where the two kinds of aggregates respectively consisted at first of similar segments, which gradually became consolidated. Among animals the annulose type best shows us this transformation with all its concomitants. The segments, or somites, as they are called, forming a low kind of aquatic worm, such as a *Syllis*, repeat one another's structures. Each has its enlargement of the alimentary canal; each its contractile dilatation of the great blood-vessel; each its portion of the double nervous cord, with ganglia when these exist; each its branches from the nervous and vascular trunks answering to those of its neighbours; each its similarly answering set of muscles; each its pair of openings through the body-wall; and so on throughout, even to the organs of reproduction. Externally, too, they have like locomotive appendages, like branchiæ, and sometimes even like pairs of eyes (*Prin. of Bio.*, § 205). But when we come to the higher *Annulosa*, such as Crustaceans and Insects, the somites of which, much more integrated, are some of them so completely fused that their divisions are no longer traceable, we find that the alimentary organs have entirely lost their original relations to the somites. In a moth or a cockroach, the abdomen of which is still externally segmented, these internal parts which carry on sustentation do not, as in the annelid, repeat one another in each segment; but the crop, stomach, glands, intestines, severally extend themselves through two, three, four, or more segments. Meanwhile it is observable that the nervous centres carrying on co-ordination, though now partially unlike in the successive segments, have by no means lost their original relations to the segments. Though in a moth the anterior ganglia, controlling the external activities, have become a good deal displaced and integrated; yet the ganglia of the abdominal segments, relatively small as they now are, remain in their localities.

With the industrial structures which arise in a large

society formed by permanent consolidation of small societies, the like happens: they extend themselves without reference to political divisions, great or little. We have around us a sufficiency of illustrations. Just noting the partial differentiations of the agricultural system, here characterized by predominance of cereal produce, here by the raising of cattle, and in mountainous parts by sheep-farming—differences that have no reference to county-boundaries—we may note more especially how the areas devoted to this or that manufacture are wholly unrelated to the original limits of political groups, and to whatever limits were politically established afterwards. We have an iron-secreting district occupying part of Worcestershire, part of Staffordshire, part of Warwickshire; the cotton manufacture is not restricted to Lancashire, but takes in a northern district of Derbyshire; and in the coal and iron region round Newcastle and Durham it is the same. So, too, of the smaller political divisions and the smaller parts of our industrial structures. A manufacturing town grows without regard to parish-boundaries; which are, indeed, often traversed by the premises of single establishments. On a larger scale the like is shown us by our great city. London overruns many parishes, and its increase is not checked by the division between Middlesex and Surrey. Occasionally it is observable that even national boundaries fail to prevent this consequence of industrial localization. instance the fact named by Hallam, that “the woollen manufacture spread from Flanders along the banks of the Rhine, and into the northern provinces of France.” Meanwhile the controlling structures, however much they change in their proportions, do not thus lose their relations to the original segments. The regulating agencies of our counties continue to represent what were once independent governments. In the old English period the county was an area ruled by a *comes* or earl, and varying in its limits with his power. According to Mr. Stubbs, “the constitutional machinery of the shire thus represents

either the national organization of the several divisions created by West Saxon conquest; or that of the early settlements which united in the Mercian kingdom as it advanced westwards; or the re-arrangement by the West Saxon dynasty of the whole of England on the principles already at work in its own shires." Similarly respecting the eighty small Gaulish states which originally occupied the area of France, M. De Coulanges says—"Ni les Romains ni les Germains, ni la féodalité ni la monarchie n'ont détruit ces unités vivaces," which up to the time of the Revolution remained substantially, as "*provinces*" and "*pays*," the minor local governments.

§ 243. This community of traits between the development of sustaining structures in an individual organism and in a social organism, requires to be expressed apart from detail before its full meaning can be seen.

What is the law of evolution in the digestive system of an animal as most generally stated? That the entire alimentary canal becomes adapted in structure and function to the matters, animal or vegetal, brought in contact with its interior; and, further, that its several parts acquire fitnesses for dealing with these matters at successive stages of their preparation: that is, the foreign substances serving for sustentation, on which its interior operates, determine the general and special characters of that interior. And what, stated in terms similarly general, is the law of evolution of the industrial system in a society? That as a whole it takes on activities and correlative structures, determined by the minerals, animals, and vegetals, with which its working population are in contact; and that industrial specializations in parts of its population, are determined by differences, organic or inorganic, in the local products those parts have to deal with.

The truth that while the material environment, yielding in various degrees and with various advantages consumable

things, thus determines the industrial differentiations, I have, in passing, joined with a brief indication of the truth that differentiations of the regulative or governmental structures are not thus determined. The significance of this antithesis remains to be pointed out when the evolution of these governmental structures is traced.

CHAPTER VIII.

THE DISTRIBUTING SYSTEM.

§ 244. IN the last chapter but one, where the relations between the three great systems of organs were briefly described, it was pointed out that neither in an animal nor in a society can development of the sustaining system or of the regulating system go on without concomitant development of the distributing system. Transition from a partially-coherent group of tribes that are severally self-sufficing, to a completely-coherent group in which industrial differences have arisen, cannot take place without the rise of an agency for transferring commodities; any more than a cluster of similar polypites can be changed into such a combination as we see in *Diphyes*, without some modification facilitating conveyance of nutriment from its feeding members to its swimming members. A mediæval society formed of slightly-subordinated feudal states, each having besides its local lord its several kinds of workers and traders within itself, just as an annelid is formed of segments, each having besides its ganglia its own appendages, branchiæ and simple alimentary tract; can no more pass into an integrated society having localized industries like our own, without the development of roads and commercial classes, than the annelid can evolve into a crustacean or insect, characterized by numerous unlikenesses of parts and actions, without the growth of a centralized vascular system.

Here, then, we have to observe the implied parallelisms

between the distributing systems, individual and social, in their successive stages.

§ 245. Protozoa of the rhizopod type are without channels of communication from part to part. The close proximity of the parts, the likeness of function among the parts, and their great variability of relative position, make a distributing system alike useless and impracticable. Even such animal aggregates as *Myxomycetes*, which are of considerable extent but are homogeneous, have no permeable lines for the distribution of nutriment. So is it with low societies.

Tribes that are small, migratory, and without division of labour, by each of these characters negative the formation of channels for intercourse. A group of a dozen or two, have among themselves such small and indefinite communications as scarcely to make tracks between huts; when migratory, as they mostly are, such beaten paths they begin forming at each temporary abode are quickly overgrown; and even where they are settled, if they are scattered and have no unlikenesses of occupations, the movements of individuals from place to place are so trifling as scarcely to leave traces.

Compound aggregates of which the parts, differently related to conditions, assume different functions, must have channels for transfer which develop as the aggregates grow. Through the mere double-walled sac constituting a hydra, nutritive matter absorbed by the inner layer, may reach the outer layer without visible openings: passing, as we may assume, along lines of least resistance which, once opened, are continually followed and made more permeable. With advance to larger aggregates having parts further from the stomach, there comes first a branching stomach—a gastric cavity that sends ramifications throughout the body. Distribution of crude nutritive matters through such gastric sinuses occurs in the *Medusæ* and again in the *Planariæ*. But in those higher types characterized by a

peri-visceral sac containing the filtered nutriment, this, which is the rudiment of a vascular system, becomes the cavity out of which there diverge channels ramifying through the tissues—*lacunæ* probably formed by the draughts of liquid caused by local demands, and established by the repetition of such draughts.

With societies, as with living bodies, channels of communication are produced by the movements which they afterwards facilitate: each transit making subsequent transits easier. Sometimes lines opened by animals are followed; as by the Nagas, who use the tracks made through the jungle by wild beasts. Similarly caused, the early paths of men are scarcely better than these. As described by Thompson, the roads of the Bechuanas are “with difficulty to be distinguished from those made by the quaghas and antelopes.” Burton says that throughout Eastern Africa “the most frequented routes are foot-tracks like goat-walks.” And even in Abyssinia, according to Parkyns, a high road “is only a track worn by use, and a little larger than the sheep-paths, from the fact of more feet passing over it.” Even with such social growth as produces towns carrying on much intercourse, there is at first nothing more than an undesigned production of a less resistant channel by force of much passing. Describing the road between the old and new capitals of the Bechuanas, Burchell says—“This consists of a number of footpaths wide enough only for a single person, and running either parallel to each other, or crossing very obliquely. I counted from twelve to about eighteen or twenty of these paths, within the breadth of a few yards.”

In animal organisms, ascending from the stage in which there is a mere oozing of nutritive liquids through the most permeable places in the tissues, to the stage in which occasional currents move feebly through indefinite sinuses, we come at length to the stage in which there are regular motions of blood along vessels having definite walls. As before pointed out, the formation of a true vascular system

begins in the central region and spreads to the periphery at first there arises in the peri-visceral sac a short open-mouthed tube, by the rhythmical contractions of which agitation is kept up in the surrounding liquid, now entering one end of this pulsating tube and now the other; and gradually this primitive heart, elongating and giving off derivative contractile vessels which ramify into the *lacunæ*, originates a vascular system.

The like happens with these channels of communication through the social organism. indefinite *lacunæ*, as we see that they all are at the outset, first acquire definite boundaries in the parts where there is most traffic. Describing the East African roads, which are in most places like goat-walks, Burton says that "where fields and villages abound they are closed with rough hedges, horizontal tree-trunks, and even rude stockades, to prevent trespassing and pilferage" So, too, in Dahomey, though the roads are said to be mostly footpaths, yet Burton says that "the roads to the coast, except in a few places, are good enough for wheeled vehicles," while "the road, six or seven miles long, separating the two capitals, may compare with the broadest in England," and from the capital of Ashantee, described as having broad, clean streets, there radiate towards distant parts of the territory eight pathways, cut by successive kings through the forest—doubtless replacing the primitive paths made by traffic. Ignoring Roman roads, which were not produced by local evolution, we may trace in our history this centrifugal development of channels of communication. The paving of the central parts of London did not begin till after the eleventh century; and, having got as far outwards as Holborn at the beginning of the fifteenth century, it spread into some of the suburbs during the sixteenth century. In Henry VIIIth's reign a way, when too deep and mry to be passable, was "merely abandoned and a new track selected." Up to 1750 the great north road from London was a turnpike for the first 100 miles, and "north of that point there was only a narrow causeway fit for pack-horses,

flanked with clay sloughs on either side " At the same time, in North-England and Mid-England, the roads were "still for the most part entirely un-enclosed " Then the macadamized road, a product of our own century, beginning with main lines of communication, gradually extended itself centrifugally first to all turnpikes, then to parish roads, and finally to private roads.

Further parallelisms may be indicated With increased pressure of traffic has come, in addition to the road, the railway; which, in place of a single channel for movement in both directions, habitually has a double channel—up-line and down-line—analogous to the double set of tubes through which, in a superior animal, blood proceeds from the centre and towards the centre. As in the finished vascular system the great blood-vessels are the most direct, the divergent secondary ones less direct, the branches from these more crooked still, and the capillaries the most tortuous of all; so we see that these chief lines of transit through a society are the straightest, high roads less straight, parish roads more devious, and so on down to cart-tracks through fields.

One more strange parallel exists In considerably-developed animals, as many *Mollusca*, though the vascular system is so far complete in its central parts that the arteries have muscular coats, and are lined with "pavement epithelium," it nevertheless remains incomplete at the periphery the small blood-vessels terminate in *lacunæ* of the primitive kind Similarly in the developed distributing system of a society, we see that while the main channels are definitely bounded and have surfaces fitted for bearing the wear and tear of great traffic, the divergent channels carrying less traffic are less highly structured; and so on with the re-divergent ones which, becoming less finished as they ramify, everywhere end in *lacunæ*—unfenced, unmetalled tracks for farm-cart, horse, or pedestrian, through field or wood, over moor and mountain

Notice must, before closing, be taken of the fact that

in proportion as organisms, individual and social, develop largely the appliances for conflict with other organisms, these channels of distribution arise not for internal sustentation only, but partly, and often mainly, for transferring materials from the sustaining parts to the expending parts. As in an animal with a large nervo-muscular system, arteries are formed more for carrying blood from the viscera to the brain and limbs than for carrying blood from one viscus to another, so in a kingdom with activities predominantly predatory the chief roads are those made for military purposes. The consumption of men and supplies in war, makes more necessary than all others the roads which take them; and they are the first to assume definiteness. We see this in the above-named royal roads in Ashantee; and are reminded of the relation in the empire of the Romans, between finished roads and military activity at remote points. The principle, however, remains the same be it in the commercial railways of England or the military railways of Russia, the channels arise between places of supply and places of demand, though the consumption may be here in peace and there in war.

§ 246. When from the channels which carry, in the one case blood-corpuscles and serum and in the other case men and commodities, we turn to the movements along them, we meet with further analogies. Though the social circulation does not throughout answer to the circulation in a living body, it shows sundry agreements.

Devoid of channels for distribution, low types of animals show us nothing but an extremely slow, as well as irregular, diffusion through the tissues, and so in primitive societies, where nothing beyond a small amount of barter goes on, the exchanged products are dispersed very gradually and in indefinite ways: the movements are feeble, and do not constitute anything like circulation. On ascending to such a type as an ascidian, having a peri-visceral sac with pulsating vessel in it, we see a distribution of nutriment

which cannot be called circulation, but which approaches to it the pulsations, setting up in the surrounding fluid such waves as send feeble currents through the sinuses and *lacunæ*, presently undergo a reversal, causing movement in the opposite direction. This alternation of waves now setting towards a certain part which thereupon becomes congested, and presently setting away from it towards parts which have been drained, is analogous to the first movement of distribution in developing societies. We do not begin with constant currents in the same directions; but we begin with periodical currents, now directed to certain spots and then away from them. Unquestionably, what when established we know as a fair, is the commercial wave in its first form. We find it in slightly advanced societies. The Sandwich Islanders met on the Wairuku river at stated times to exchange their products, and the Fijians of different islands, assembled occasionally at a fixed place for barter. Of course, with the increase of population these streams of people and commodities which set at intervals to and from certain places, become more frequent. The semi-civilized African kingdoms show us stages. On the Lower Niger, "every town has a market once in four days," and at different parts of the river a large fair once a fortnight. We learn from Park that in other cases, as at Sansanding, besides some daily sale there was a great market once a week, to which crowds from the surrounding country came. And then in the largest places, such as Timbuctoo, constant distribution has replaced periodic distribution. So, too, in the Batta territory, Sumatra, there are assemblings for traffic every fourth day; and in Madagascar, besides the daily market in the capital, there are markets at longer intervals in the provincial towns. Ancient American societies displayed this stage passing into a higher. Among the Chibchas, along with constant traffic, the greatest traffic was at eight-day intervals, and Mexico, besides daily markets, had larger markets every five days, which, in adjacent cities,

were at different dates : there being meanwhile merchants who, Sahagun says, "go through the whole country * * * buying in one district and selling in others"—so foreshadowing a more developed system. Clearly these occasional assemblings and dispersings, shortening their intervals until they reach a daily bringing of products by some and buying by others, thus grow into a regular series of frequent waves, transferring things from places of supply to places of demand. Our own history shows how such slow periodic repletions and depletions, now in this locality and now in that, pass gradually into a rapid circulation. In early English times the great fairs, annual and other, formed the chief means of distribution, and remained important down to the seventeenth century, when not only villages but even small towns, devoid of shops, were irregularly supplied by hawkers who had obtained their stocks at these gatherings. Along with increased population, larger industrial centres, and improved channels of communication, local supply became easier, and so, frequent markets more and more fulfilled the purpose of infrequent fairs. Afterwards in chief places and for chief commodities, markets themselves multiplied; becoming in some cases daily. Finally came a constant distribution such that of some foods there is to each town an influx every morning, and even more than one in the day. The transition from times when the only movements of people and goods between places were private, slow, and infrequent, to times when there commenced at intervals of several days public vehicles moving at only four miles an hour, and then to times when these shortened their intervals and increased their speed while their lines of movement multiplied, ending in our own times when along each line of rails there goes many times daily at high speed a wave that is relatively vast; sufficiently show us how the social circulation progresses from feeble, slow, irregular movements to a rapid, regular, and powerful pulse.

§ 247. If from the channels of communication and the

movements along them, we turn to the circulating currents themselves, and consider their natures and their relations to the parts, we still meet with analogies.

Relatively simple in a low animal, the nutritive fluid becomes in a high animal relatively complex—a heterogeneous combination of general and special materials required by, and produced by, the several parts. So, too, the currents of commodities, if they can be so called, which move from place to place in a low society, are little varied in composition, but as we advance to high societies, the variety of components in the currents continually increases. Moreover, the parallelism of composition holds in another way, for in both cases relative simplicity is joined with crudity, whereas relative complexity in both cases results from elaboration. In low animal types the product of a rude digestion is carried in an unprepared state through extensions of the gastric cavity to the neighbourhood of the parts which need it, but in developed types the refined products are separated and distributed—protein substances of several kinds, fats, sugar, etc. And while the blood is thus made heterogeneous by containing many matters fitted for use, and while its heterogeneity is increased by the swarms of specially-adapted corpuscles which take part in the processes of purification, etc., it is made more heterogeneous still by the inorganic constituents which aid molecular change, as well as by the effete products of molecular change on their way to places of exit. If now with the currents in a low society, we contrast the currents in an advanced society, we see that here, too, the greater heterogeneity is mainly caused by the many kinds of manufactured articles fitted for consumption; and though certain waste products of social life do not return into the circulating currents, but are carried off by under-ground channels, yet other waste products are carried off along the ordinary channels of the circulation which bring materials for consumption. Next we have to note the special actions

which the local structures exert on the general current of commodities. While in a living body the organs severally take up from the blood everywhere carried through them, the materials needed for their sustentation, those which are occupied in excretion and secretion also severally take from the blood particular ingredients, which they cast out or compound. A salivary gland forms from the matters it appropriates, a liquid capable of changing starch into sugar and so aiding the subsequent preparation of food; the gastric follicles elaborate and pour out acids, etc., which help to dissolve the contents of the stomach; the liver, separating certain waste components casts them into the intestine as bile, along with that glycogen it forms from other components which is to be re-absorbed for use; and the units of these several organs live, grow, and multiply, by carrying on their several businesses. So is it with social organs. While all of them, under restrictions to be hereafter specified, absorb from the distributed supply of commodities shares needful for their sustentation, such of them as carry on manufactures, large or small, also select from the heterogeneous streams of things that run everywhere, the materials which they transform, and afterwards return into these streams the elaborated products. Ignoring for the moment the familiar aspect of sale and purchase, under which these transactions present themselves to us, and contemplating simply the physical process, we see it to be undeniable that each industrial structure, allowing various materials to pass through its streets untouched, takes out of the mixed current those it is fitted to act upon, and throws into the circulating stock of things, sometimes through a different channel, the articles it has prepared for general consumption.

The fact that competition is common to the two cases must also be observed. Though commonly thought of as a phenomenon, exclusively social, competition exists in a living body—not so obviously between parts that carry on

the same function, as between parts that carry on different functions. The general stock of nutriment circulating through an organism has to support the whole. Each organ appropriates from this general stock all it can, for repair and growth. Whatever each takes, diminishes by so much the amount available for the rest. All other organs therefore, jointly and individually, compete for blood with each organ. So that though the welfare of each is indirectly bound up with that of the rest; yet, directly, each is antagonistic to the rest. Hence it happens that extreme cerebral action so drafts away the blood as to stop digestion, that, conversely, the visceral demand for blood after a heavy meal often so drains the brain as to cause sleep, and that extremely violent exertion, carrying an excessive amount of blood to the motor organs, may both arrest digestion and diminish thought and feeling. While these facts prove that there is competition, they also prove that the exalted function of a part caused by demands made on it, determines the flow of blood to it. Though, as we shall hereafter see, there is in the higher organisms a kind of regulation which secures a more prompt balancing of supplies and demands under this competitive arrangement, yet, primarily, the balancing results from the setting of blood towards parts in proportion to their activities. Morbid growths, which not only draw to themselves much blood, but develop in themselves vascular structures to distribute it, show us how local tissue formation (which under normal conditions measures the waste of tissue in discharging functions) is itself a cause of increased supply of materials.

Now we have daily proof that in a society, not only individuals but classes, local and general, severally appropriate from the total stock of commodities as much as they can; and that their several abilities to appropriate normally depend upon their several states of activity. If less iron is wanted for export or home consumption, furnaces are blown out, men are discharged, and there flows towards the district a diminished

stream of the things required for nutrition, causing arrest of growth and, if continued, even decay. When a cotton famine entails greater need for woollens, the increased activity of the factories producing them, while it leads to the drawing in of more raw material and sending out of more manufactured goods, determines towards the cloth districts augmented supplies of all kinds—men, money, consumable commodities, and there results enlargement of old factories and building of new ones. Evidently this process in each social organ, as in each individual organ, results from the tendency of the units to absorb all they can from the common stock of materials for sustentation; and evidently the resulting competition, not between units simply but between organs, causes in a society, as in a living body, high nutrition and growth of parts called into greatest activity by the requirements of the rest.

§ 248. Of course, along with these likenesses there go differences, due to the contrast named at the outset between the concreteness of an individual organism and the discreteness of a social organism. I may name, first, a difference which accompanies the likeness last dwelt upon.

If the persons forming a body politic were mostly fixed in their positions, as the units forming an individual body are, the feeding of them would have to be similarly effected. Their respective shares of nutriment, not simply brought to their neighbourhood, would have to be taken home to them. A process such as that by which certain kinds of food are daily carried round to houses by a class of locomotive units, would be the universal process. But as members of the body politic, though having stationary habitations and working places, are themselves locomotive, it results that the process of distribution is effected partly in this way and partly by their own agency.

Further, there results from the same general cause, a difference between the ways in which motion is given to the circulating currents in the two

cases. Physical cohesion of the parts in an individual living body, makes possible the propulsion of the nutritive liquid by a contractile organ ; but lacking this physical cohesion, and lacking too the required metamorphosis of units, the body-politic cannot have its currents of commodities thus moved : though remotely produced by other forces, their motion has to be proximately produced by forces within the currents themselves.

Recognizing these unlikenesses, however, we see that they do but qualify the essential likenesses. In both cases so long as there is little or no differentiation of parts there is little or no need for channels of communication among the parts , and even a slight differentiation, when such only that the unlike parts remain in close contact, does not demand appliances for transfer. But when the division of labour, physiological or sociological, has so far progressed that parts at some distance from one another co-operate, the growth of channels of distribution, with agents effecting distribution, becomes necessary , and the development of the distributing system has to keep pace with the other developments.

A like necessity implies a like parallelism between the progressing circulations in the two cases. Feeble activities, small amounts of exchange, obstacles to transfer, unite in preventing at first anything more than very slow and irregular repletions and depletions, now at one place now at another ; but with increase of parts increasingly specialized in their functions, increasingly efficient therefore, and combining to produce an increased amount of general life, there goes an increased need for large distributions in constant directions. Irregular, weak and slow movements at long intervals, are changed into a regular rapid rhythm by strong and unceasing local demands. Yet more. With the advance of the aggregate, individual or social, to a greater heterogeneity, there goes advancing heterogeneity in the circulating currents, which, at first containing few crude matters, contain at last many prepared

matters. In both cases, too, those structures which elaborate the requisites for sustentation, stand to these currents in like relations—take from them the raw materials on which they have to operate, and directly or indirectly deliver into them again the products, and in both cases these structures, competing with one another for their shares of the circulating stock of consumable matters, are enabled to appropriate, to repair themselves, and to grow, in proportion to their performances of functions.

Stated most generally, the truth we have to carry with us is that the distributing system in the social organism, as in the individual organism, has its development determined by the necessities of transfer among inter-dependent parts. Lying between the two original systems, which carry on respectively the outer dealings with surrounding existences, and the inner dealings with materials required for sustentation, its structure becomes adapted to the requirements of this carrying function between the two great systems as wholes, and between the sub-divisions of each.

CHAPTER IX.

THE REGULATING SYSTEM.

§ 249. WHEN observing how the great systems of organs, individual and social, are originally marked off from one another, we recognized the general truth that the inner and outer parts become respectively adapted to those functions which their respective positions necessitate—the one having to deal with environing actions and agents, the other having to use internally-placed materials. We have seen how the evolution of interior structures is determined by the natures and distributions of these matters they are in contact with. We have now to see how the evolution of the structures carrying on outer actions is determined by the characters of things existing around.

Stated in a more concrete form, the fact to be now set forth is, that while the alimentary systems of animals and the industrial systems of societies, are developed into fitness for dealing with the substances, organic and inorganic, used for sustentation, the regulating and expending systems (nervo-motor in the one, and governmental-military in the other) are developed into fitness for dealing with surrounding organisms, individual or social—other animals to be caught or escaped from, hostile societies to be conquered or resisted. In both cases that organization which fits the aggregate for acting together as a whole in conflict with

other aggregates, indirectly results from the carrying on of the continued conflict with other aggregates.

§ 250. To be slow of speed is to be caught by an enemy ; to be wanting in swiftness is to fail in catching prey · death being in either case the result. Sharp sight saves the herbivorous animal from a distant carnivore , and is an essential aid to the eagle's successful swoop on an animal far below, which would else have escaped. Obviously it is the same with quickness of hearing and delicacy of scent ; the same with all improvements of limbs that increase the power, the agility, the accuracy of movements , the same with all appliances for attack and defence—claws, teeth, horns, etc. And equally true must it be that each advance in that nervous system which, using the information coming through the senses, excites and guides these external organs, becomes established by giving an advantage to its possessor in presence of prey, enemies, and competitors. On glancing up from low types of animals having very imperfect eyes and feeble powers of motion, to high types of animals having wide vision, considerable intelligence, and great activity, it becomes undeniable that where loss of life is entailed on the first by these defects, life is preserved in the last by these superiorities. The implication, then, is that successive improvements of the organs of sense and motion, and of the internal co-ordinating apparatus which uses them, have indirectly resulted from the antagonisms and competitions of organisms with one another.

A parallel truth is disclosed on watching how there evolves the regulating system of a political aggregate, and how there are developed those appliances for offence and defence put in action by it. Everywhere the wars between societies originate governmental structures, and are causes of all such improvements in those structures as increase the efficiency of corporate action against envioning societies. Observe, first, the conditions under which there

is an absence of this agency furthering combination, and then observe the conditions under which this agency begins to show itself.

Where food is scarce, diffusion great, and co-operation consequently hindered, there is no established chieftainship. The Fuegians, the Cayaguas or Wood-Indians of South America, the Jungle-Veddahs of Ceylon, the Bushmen of South Africa, are instances. They do not form unions for defence, and have no recognized authorities · personal predominance of a temporary kind, such as tends to arise in every group, being the only approach to it. So of the Esquimaux, necessarily much scattered, Hearne says—"they live in a state of perfect freedom ; no one apparently claiming the superiority over, or acknowledging the least subordination to, another " joined with which fact stands the fact that they do not know what war means. And in like manner where barrenness of territory negatives anything more than occasional assemblings, as with the Chippewayans, there is nothing like chieftainship beyond the effect due to character, and this is very small.

In other cases adequate concentration is negated by the natures of the people. They are too little social or too little subordinate. It is thus with the Abors, Hill-tribes of India, who, "as they themselves say, are like tigers, two cannot dwell in one den," and who have their houses "scattered singly or in groups of two and three." It is thus, too, as before pointed out (§ 35), with the Mantras of the Malay peninsula, who "separate if they dispute." Here both the diffusion and the disposition causing the diffusion, check the evolution of a political head. But it is not only in cases like these that governmental co-ordination is absent. It is absent also among tribes that are settled and considerably more advanced, provided they are not given to war. Among such Papuans as the Arafuras and the people of Dalrymple Island, there are no chiefs the people living "in such peace and brotherly love with one another" that they need no control but the de-

cisions of their elders. The Todas, too, wholly without military organization, and described as peaceable, mild, friendly, have no political headships. So again is it with the placable Bodo and Dhimals; described as having many amiable qualities—being honest, truthful, entirely free from revenge, cruelty, and violence—and whose headmen have authorities scarcely more than nominal. To which, as similarly significant, I may add that the Lepchas, referred to by Dr. Hooker as “really amiable,” are said by Campbell to be “wonderfully honest,” “singularly forgiving of injuries,” “making mutual amends and concessions”; while at the same time “they are averse to soldiering, and cannot be induced to enlist in our army,” and are so little subordinate that they fly to the jungle and live on roots rather than submit to injustice.

Now observe how the headless state is changed and political co-ordination initiated. Edwards says the Caribs in time of peace admitted no supremacy only their old men had a kind of ill-defined authority; but, he adds, “in war, experience had taught them that subordination was as requisite as courage” So, too, describing the confederation of tribes among the Caribs, Humboldt says they are “war-like hordes who see no advantage in the ties of society but for common defence” Of the Creeks, whose subordination to authority is but slight, Swan tells us that “it would be difficult, if not impossible, to impress on the community at large the necessity of any social compact, that should be binding upon it longer than common danger threatened them” Again Bonwick says—“Chieftains undoubtedly did exist among the Tasmanians, though they were neither hereditary nor elective They were, nevertheless, recognized, especially in time of war, as leaders of the tribes * * * After the cessation of hostilities they retired to the quietude of every-day forest life” In other cases we find a permanent change produced Kotzebue says the Kamtschadales “acknowledge no chief”, while

Grieve says that the only authority was that of "the old men, or those who were remarkable for their bravery." And then it is remarked that these statements refer to the time before the Russian conquest—before there had been combined opposition to an enemy.

This development of simple headship in a tribe by conflict with other tribes, we find advancing into compound headship along with larger antagonisms of race with race. Of the Patagonians Falkner tells us that though the tribes "are at continual variance among themselves, yet they often join together against the Spaniards." It was the same with the North American Indians. The confederacy of the six nations, which held together under a settled system of co-operation, resulted from war with the English. Stages in the genesis of this compound controlling agency by conflict with other societies are shown us by the Polynesians. In Samoa eight or ten village-communities, which are in other respects independent,

"unite by common consent, and form a district or state for mutual protection * * * When war is threatened by another district, no single village can act alone, * * * Some of these districts or states have their king, others cannot agree on the choice of one, * * * there is no such thing as a king, or even a district whose power extends all over the group. Yet in case of war, they sometimes combine in twos or threes."

Early histories of the civilized similarly show us how union of smaller social aggregates for offensive or defensive purposes, necessitating co-ordination of their actions, tends to initiate a central co-ordinating agency. Instance the Hebrew monarchy: the previously-separate tribes of Israelites became a nation subordinate to Saul and David, during wars with the Moabites, Ammonites, Edomites and Philistines. Instance the case of the Greeks: the growth of the Athenian hegemony into mastership, and the organization, political and naval, which accompanied it, was a concomitant of the continued activity of the confederacy against external enemies. Instance in later times the development

of governments among Teutonic peoples. At the beginning of the Christian era there were only chieftainships of separate tribes; and, during wars, temporary greater chieftainships of allied forces. Between the first and the fifth centuries the federations made to resist or invade the Roman empire did not evolve permanent heads, but in the fifth century the prolonged military activities of these federations ended in the military leaders becoming kings over consolidated states

As this differentiation by which there arises first a temporary and then a permanent military head, who passes insensibly into political head, is initiated by conflict with adjacent societies, it naturally happens that his political power increases as military activity continues. Other things equal, corporate action of a society in war, is effective in proportion as obedience to a commander is profound; and obviously if success thus going along with submission to control, leads to the conquest or extermination of peoples who are less subordinate; it follows that the subordination causing success in wars, and the consequent persistence in wars, tend to go together and to further one another. Everywhere, providing extreme diffusion does not prevent, we find this union of predatory activity with submission to despotic rule. Asia shows it in the Kirghiz tribes, who are slave-hunters and robbers, and of whose manaps, once elective but now hereditary, Michael says—"The word manap literally means a tyrant, in the ancient Greek sense. It was at first the proper name of an elder distinguished for his cruelty and unrelenting spirit; from him the appellation became general to all the Kirghiz rulers" Africa shows it in the cannibal Niamniams, whose king is unlimited lord of persons and things; or again in the sanguinary Dahomans with their Amazon army, and the warlike Ashantees, all trained to arms. both of them under governments so absolute that the highest officials are slaves to the king Polynesia shows it in the Fijians, whose tribes are ever fight-

ing with and eating one another, and among whom loyalty to absolute rulers is the extremest imaginable—even so extreme that people of a slave district “said it was their duty to become food and sacrifices for the chiefs.” This relation between the degree of power in the political head and the degree of military activity, has, indeed, been made familiar to us in the histories of ancient and modern civilized races. The connexion is implied in the Assyrian inscriptions as well as in the frescoes and papyri of Egypt. The case of Pausanias and other such cases, were regarded by the Spartans themselves as showing the tendency of generals to become despots—as showing, that is, the tendency of active operations against adjacent societies to generate centralized political power. How the imperative-ness fostered by continuous command of armies, and affecting a society in proportion as its armies are identified with it, thus passes into political imperativeness, has been again and again shown us in later histories

Here, then, the induction we have to carry with us is that as in the individual organism that *nervo-muscular apparatus* which carries on conflict with environing organisms, begins with, and is developed by, that warfare, so the governmental-military organization of a society, is initiated by, and evolves along with, the wars between societies. Or to speak more strictly, there is thus evolved that part of its governmental organization which conduces to efficient co-operation against other societies.

§ 251. The development of the regulating system may now be dealt with. Let us first trace the governmental agency through its stages of complication.

In small and little-differentiated aggregates, individual and social, the regulating structure does not become complex neither the need for it nor the materials for forming and supporting it, exist. But complexity begins in compound aggregates. In either case its commencement is seen

in the rise of a superior co-ordinating centre exercising control over inferior centres. Among animals the *Annulosa* illustrate this most clearly. In an annelid the like nervous structures of the like successive segments, are but little subordinated to any chief ganglion or group of ganglia. But along with that evolution which, integrating and differentiating the segments, produces a higher annulose animal, there arise at the end which moves foremost, more developed senses and appendages for action, as well as a cluster of ganglia connected with them; and along with formation of this goes an increasing control exercised by it over the ganglia of the posterior segments. Not very strongly marked in such little-integrated types as centipedes, a nervous centralization of this kind becomes great in such integrated types as the higher crustaceans and the arachnida.

So is it in the progress from compound social aggregates that are loosely coherent to those which are consolidated. Manifestly during those early stages in which the chief of a conquering tribe succeeds only in making the chiefs of adjacent tribes tributary while he lives, the political centralization is but slight; and hence, as in cases before referred to in Africa and elsewhere, the powers of the local centres re-assert themselves when they can throw off their temporary subordination. Many peoples that have got beyond the stage of separate simple tribes, show us, along with various degrees of cohesion, various stages in the subjection of local governing centres to a general governing centre. When first visited, the Sandwich Islanders had a king with turbulent chiefs, formerly independent; and in Tahiti there was similarly a monarch with secondary rulers but little subordinate. So was it with the New Zealanders; and so was it with the Malagasy until a century since. The nature of the political organization during such stages, is shown us by the relative degrees of power which the general and special centres exercise over the people of each division. Thus of the Tahitians we read

that the power of the chief was supreme in his own district, and greater than that of the king over the whole. Lichtenstein tells us of the Koossas that "they are all vassals of the king, chiefs, as well as those under them, but the subjects are generally so blindly attached to their chiefs, that they will follow them against the king." "Scarcely would the slave of an Ashantee chief," says Cruickshank, "obey the mandate of his king, without the special concurrence of his immediate master." And concerning the three grades of chiefs among the Araucanians, Thompson says of those who rule the smallest divisions that "their authority is less precarious" than that of the higher officers. These few instances, which might be readily multiplied, remind us of the relations of major and minor political centres in feudal times, when there were long periods during which the subjection of barons to kings was being established—during which failures of cohesion and re-assertions of local authority occurred—during which there was loyalty to the district ruler greater than that to the general ruler.

And now let us note deliberately, what was before implied, that this subordination of local governing centres to a general governing centre, habitually accompanies co-operation of parts of the compound aggregate in its conflicts with other such aggregates. Between such superior *Annulosa* as the winged insects and clawed crustaceans above described as having centralized nervous systems, and the inferior *Annulosa* composed of many similar segments with feeble limbs, the contrast is not only in the absence from these last of centralized nervous systems, but also in the absence of offensive and defensive appendages of efficient kinds. In the high types, nervous subordination of the posterior segments to the anterior, has accompanied the growth of those anterior appendages which preserve the aggregate of segments in its dealings with prey, and this centralization of the nervous structure has resulted from the co-operation of these external organs. It

is thus also with the political centralizations which become permanent. So long as the subordination is established by internal conflict of the divisions with one another, and hence involves antagonism among them, it remains unstable, but it tends towards stability in proportion as the regulating agents, major and minor, are habituated to combined action against external enemies. The recent changes in Germany have re-illustrated under our eyes this political centralization by combination in war, which was so abundantly illustrated in the Middle Ages by the rise of monarchical governments over numerous fiefs.

How this compound regulating agency for internal control, results from combined external actions of the compound aggregate in war, we may understand on remembering that at first the army and the nation are substantially the same. As in each primitive tribe the men are all warriors, so, during early stages of civilization the military body is co-extensive with the adult male population, excluding only the slaves—co-extensive with all that part of the society which has political life. In fact the army is the nation mobilized, and the nation the quiescent army. Hence men who are local rulers while at home, and leaders of their respective bands of dependents when fighting a common enemy under direction of a general leader, become minor heads disciplined in subordination to the major head, and as they carry more or less of this subordination home with them, the military organization developed during war survives as the political organization during peace.

Chiefly, however, we have here to note that in the compound regulating system formed during the formation of a compound social aggregate, what were originally independent local centres of regulation become dependent local centres, serving as deputies under command of the general centre; just as the local ganglia above described become agents acting under direction of the cephalic ganglia.

§ 252. This formation of a compound regulating system

characterized by a dominant centre and subordinate centres, is accompanied, in both individual organisms and social organisms, by increasing size and complexity of the dominant centre.

In an animal, along with development of senses to yield information and limbs to be guided in conformity with it, so that by their co-operation prey may be caught and enemies escaped, there must arise one place to which the various kinds of information are brought, and from which are issued the adjusted motor impulses, and, in proportion as evolution of the senses and limbs progresses, this centre which utilizes increasingly-varied information and directs better-combined movements, necessarily comes to have more numerous unlike parts and a greater total mass. Ascending through the annulose sub-kingdom, we find in its higher types this aggregation of optic, auditory, and other ganglia receiving stimuli, together with the ganglia controlling the chief legs, claws, etc. And so in the vertebrate series, beginning in its lowest member with an almost uniform cord formed of local centres undirected by a brain, we rise finally to a cord appended to an integrated cluster of minor centres through which are issued the commands of certain supreme centres growing out of them.

In a society it similarly happens that the political agency which gains predominance, is gradually augmented and complicated by additional parts for additional functions. The chief of chiefs begins to require helpers in carrying on control. He gathers round him some who get information, some with whom he consults, some who execute his commands. No longer a governing unit, he becomes the nucleus in a cluster of governing units constituting the germ of a ministry. Various stages in this compounding, proceeding generally from the temporary to the permanent, may be observed. In the Sandwich Islands the king and governor have each a number of chiefs who attend on them and execute their orders. Ellis says that the Tahitian king had a prime minis-

ter, as well as a few chiefs to give advice, and in Samoa, too, each district chief has a sort of prime minister, Turner tells us. Africa shows us stages in this progress from simple personal government to government through agents. Among the Beetjuans (a Bechuana people) the king executes "his own sentence, even when the criminal is condemned to death;" and Lichtenstein also tells us of another group of Bechuanas (the Maatjaping) that his people being disorderly, the monarch "swung his tremendous *sjambok* of rhinoceros leather, striking on all sides, till he fairly drove the whole multitude before him " being thereupon imitated by his courtiers. And then of the Bachassin government, belonging to this same race, we learn' from Burchell that the duty of the chief's brother "was to convey the chief's orders wherever the case demanded, and to see them put in execution " Among the Koossas, governed by a king and vassal chiefs, every chief has councillors, and the great council of the king is composed of the chiefs of particular kraals. Again, the Zulu sovereign shares his power with two soldiers of his choice, and these form the supreme judges of the country. Then in the larger and more organized kingdoms, the appendages which add to the size and complexity of the governing centre, are many and fully established. In Dahomey, besides two premiers and various functionaries surrounding the king, there are two judges, of whom one or other is "almost constantly with the king, informing him of every circumstance that passes," and, according to Burton, every official is provided with a second in command, who is in reality a spy. facts proving that though the king joins in judging causes, and though when his executioners bungle he himself shows them how to cut off heads, yet he has agents around him into whose hands these functions are gradually lapsing; as, in the compound nervous structures above described, there are appended centres through which information is communicated, and appended centres through which the

decisions pass into execution. How in civilized nations analogous developments have taken place—how among ourselves William the Conqueror made his “justiciar” supreme administrator of law and finance, having under him a body of Secretaries of whom the chief was called Chancellor; how the justiciar became Prime Minister and his staff a supreme court, employed alike on financial and judicial affairs and in revision of laws, how this in course of time became specialized and complicated by appendages, needs not to be shown in detail. Always the central governing agency while being enlarged, is made increasingly heterogeneous by the multiplication of parts having specialized functions. And then, as in nervous evolution after a certain complication of the directive and executive centres is reached, there begin to grow deliberative centres, which, at first unobtrusive, eventually predominate; so in political evolution, those assemblies which contemplate the remoter results of political actions, beginning as small additions to the central governing agency, outgrow the rest. It is manifest that these latest and highest governing centres perform in the two cases analogous functions. As in a man the cerebrum, while absorbed in the guidance of conduct at large, mainly in reference to the future, leaves the lower, simpler, older centres to direct the ordinary movements and even the mechanical occupations; so the deliberative assembly of a nation, not attending to those routine actions in the body politic controlled by the various administrative agencies, is occupied with general requirements and the balancing of many interests which do not concern only the passing moment. It is to be observed, also, that these high centres in the two cases, are neither the immediate recipients of information nor the immediate issuers of commands, but receive from inferior agencies the facts which guide their decisions, and through other inferior agencies get those decisions carried into execution. The cerebrum is not a centre of sensation or of motion, but has the function of using the information brought through the

sensory centres, for determining the actions to be excited by the motor centres. And in like manner a developed legislative body, though not incapable of getting impressions directly from the facts, is habitually guided by impressions indirectly gained through petitions, through the press, through reports of committees and commissions, through the heads of ministerial departments ; and the judgments it arrives at are executed not by its immediate direction but by the mediate direction of subordinate centres, ministerial, judicial, etc.

One further concomitant may be added. During evolution of the supreme regulating centres, individual and social, the older parts become relatively automatic. A simple ganglion with its afferent and efferent fibres, receives stimuli and issues impulses unhelped and unchecked ; but when there gather round it ganglia through which different kinds of impressions come, and others through which go impulses causing different motions, it becomes dependent on these, and in part an agent for transforming the sensory excitements of the first into the motor discharges of the last. As the supplementary parts multiply, and the impressions sent by them to the original centre, increasing in number and variety, involve multiplied impulses sent through the appended motor centres, this original centre becomes more and more a channel through which, in an increasingly mechanical way, special stimuli lead to appropriate actions. Take, for example, three stages in the vertebrate animal. We have first an almost uniform spinal cord, the successive portions of which receive and send out the sensory and motor nerves supplying the successive portions of the body : the spinal cord is here the supreme regulator. Then in the nervous system of vertebrates somewhat more advanced, the medulla oblongata and the sensory ganglia at the anterior part of this cranio-spinal axis, taking a relatively large share in receiving those guiding impressions which lead to motor discharges from the spinal

cord, tend to make this subordinate and its actions mechanical the sensory ganglia have now become the chief rulers. And when in the course of evolution the cerebrum and cerebellum grow, the sensory ganglia with the co-ordinating motor centre to which they were adjoined, lapse into mere receivers of stimuli and conveyers of impulses: the last-formed centres acquire supremacy, and those preceding them are their servants.

Thus is it with kings, ministries, and legislative bodies. As the original political head, acquiring larger functions, gathers agents around him who bring data for decisions and undertake execution of them, he falls more and more into the hands of these agents—has his judgments in great degree made for him by informers and advisers, and his deputed acts modified by executive officers the ministry begins to rule through the original ruler. At a later stage the evolution of legislative bodies is followed by the subordination of ministries; who, holding their places by the support of majorities, are substantially the agents executing the wills of those majorities. And while the ministry is thus becoming less deliberative and more executive, as the monarch did previously, the monarch is becoming more automatic: royal functions are performed by commission; royal speeches are but nominally such; royal assents are practically matters of form. This general truth, which our own constitutional history so well illustrates, was illustrated in another way during the development of the Athenian institutions, political, judicial, and administrative. the older classes of functionaries survived, but fell into subordinate positions, performing duties of a comparatively routine kind.

§ 253 From the general structures of regulating systems, and from the structures of their great centres of control, we must now turn to the appliances through which control is exercised. For co-ordinating the actions of an aggregate, individual or social, there must be not only a governing

centre but there must also be media of communication through which this centre may affect the parts

Ascending stages of animal organization carry us from types in which this requirement is scarcely at all fulfilled, to types in which it is fulfilled effectually. Aggregates of very humble orders, as Sponges, *Thallassicollæ*, etc, without co-ordinating centres of any kind, are also without means of transferring impulses from part to part; and there is no co-operation to meet an environing action. In *Hydrozoa* and *Actinozoa*, not possessing visible centres of co-ordination, slow adjustments result from the diffusion of molecular changes from part to part through the body. contraction of the whole creature presently follows rough handling of the tentacles, while contact of the tentacles with nutritive matter causes a gradual closing of them around it. Here by the propagation of some influence among them, the parts are made to co-operate for the general good, feebly and sluggishly. In *Polyzoa* along with the rise of distinct nerve-centres, there is a rise of distinct nerve-fibres, conveying impulses rapidly along definite lines, instead of slowly through the substance in general. Hence comes a relatively prompt co-operation of parts to deal with sudden external actions. And as these internuncial lines multiply, becoming at the same time well adjusted in their connexions, they make possible those varied co-ordinations which developed nervous centres direct. Analogous stages in social evolution are sufficiently manifest. Over a territory covered by groups devoid of political organization, news of an inroad spreads from person to person, taking long to diffuse over the whole area, and the inability of the scattered mass to co-operate is involved as much by the absence of internuncial agencies as by the absence of regulating centres. But along with such slight political co-ordination as combination for defence produces, there arise appliances for influencing the actions of distant allies. Even the Fuegians light fires to communicate intelligence.

The Tasmanians, too, made use of signal fires ; as do also the Tannese ; and this method of producing a vague co-ordination among the parts in certain emergencies, is found among other uncivilized races . As we advance, and as more definite combinations of more varied kinds have to be effected for offence and defence, messengers are employed. Among the Fijians, for instance, men are sent with news and commands, and use certain mnemonic aids. The New Zealanders "occasionally conveyed information to distant tribes during war by marks on gourds." In such comparatively advanced states as those of Ancient America, this method of sending news was greatly developed . The Mexicans had couriers who at full speed ran six-mile stages, and so carried intelligence, it is said, even 300 miles in a day , and the Peruvians, besides their fire and smoke signals in time of rebellion, had runners of the same kind. Thus what is in its early stage a slow propagation of impulses from unit to unit throughout a society, becomes, as we advance, a more rapid propagation along settled lines so making quick and definitely-adjusted combinations possible. Moreover, we must note that this part of the regulating system, like its other parts, is initiated by the necessities of co-operation against other societies. As in later times among Highland clans, the fast runner, bearing the fiery cross, carried a command to arm ; so, in early English times, the messages were primarily those between rulers and their agents, and habitually concerned military affairs. Save in these cases (and even state-messengers could not move swiftly along the bad roads of early days) the propagation of intelligence through the body politic was very slow. The slowness continued down to comparatively late periods. The death of Queen Elizabeth was not known in some parts of Devon until after the Court had gone out of mourning ; and the news of the appointment of Cromwell as Protector took nineteen days to reach Bridgwater . Nor have we to remark only the tardy spread of the influences required for

co-operation of parts. The smallness and uniformity of these influences have also to be noted in contrast with their subsequent greatness and multiformity. Instead of the courier bearing a solitary despatch, military or political, from one ruling agent to another, at irregular intervals in few places, there come eventually, through despatches of multitudinous letters daily and several times a-day, in all directions through every class, swift transits of impulses, no less voluminous than varied, all instrumental to co-operation.

Two other internuncial agencies of more developed kinds are afterwards added. Out of the letter, when it had become comparatively frequent among the educated classes, there came the news-letter: at first a partially-printed sheet issued on the occurrence of an important event, and having an unprinted space left for a written letter. From this, dropping its blank part, and passing from the occasional into the periodic, came the newspaper. And the newspaper has grown in size, in multitudinousness, in variety, in frequency, until the feeble and slow waves of intelligence at long and irregular intervals, have become the powerful, regular, rapid waves by which, twice and thrice daily, millions of people receive throughout the kingdom stimulations and checks of all kinds, furthering quick and balanced adjustments of conduct.

Finally there arises a far swifter propagation of stimuli serving to co-ordinate social actions, political, military, commercial, etc. Beginning with the semaphore-telegraph, which, reminding us in general principle of the signal-fires of savages, differed by its ability to convey from station to station not single vague ideas only, but numerous, complex, and distinct ideas, we end with the electric-telegraph, immeasurably more rapid, through which go quite definite messages, infinite in variety and of every degree of complexity. And in place of a few such semaphore-telegraphs, transmitting, chiefly for governmental purposes, impulses in a few directions, there has come a multiplicity of lines of instant com-

munication in all directions, subserving all purposes. Moreover, by the agency of these latest internuncial structures, the social organism, though discrete, has acquired a promptness of co-ordination equal to, and indeed exceeding, the promptness of co-ordination in concrete organisms. It was before pointed out (§ 221) that social units, though forming a discontinuous aggregate, achieve by language a transmission of impulses which, in individual aggregates, is achieved by nerves. But now, utilizing the molecular continuity of wires, the impulses are conveyed throughout the body politic much faster than they would be were it a concrete living whole. Including times occupied by taking messages to and from the offices in each place, any citizen in Edinburgh may give motion to any citizen in London, in less than one-fourth the time a nervous discharge would take to pass from one to the other, were they joined by living tissue. Nor should we omit the fact that parallelism in the requirements has caused something like parallelism in the arrangements of the internuncial lines. From great social centres diverge many large clusters of wires, from which, as they get further away, diverge at intervals minor clusters, and these presently give off re-diverging clusters, just as main bundles of nerves on their way towards the periphery, from time to time emit lateral bundles, and these again others. Moreover, the distribution presents the analogy that near chief centres these great clusters of internuncial lines go side by side with the main channels of communication—railways and roads—but frequently part from these as they ramify, in the same way that in the central parts of a vertebrate animal, nerve-trunks habitually accompany arteries, while towards the periphery the proximity of nerves and arteries is not maintained. The only constant association being also similar in the two cases, for the one telegraph wire which accompanies the railway system throughout every ramification, is the wire which checks and excites its traffic, as the one nerve which everywhere accompanies an

artery is the vaso-motor nerve regulating the circulation in it. Once more, it is a noteworthy fact that in both cases insulation characterizes the internuncial lines. Utterly unlike as are the molecular waves conveyed, it is needful in both cases that they should be limited to the channels provided. Though in the aerial telegraph-wires insulation is otherwise effected, in under-ground wires it is effected in a way analogous to that seen in nerve-fibres. Many wires united in a bundle are separated from one another by sheaths of non-conducting substance; as the nerve-fibres that run side by side in the same trunk, are separated from one another by their respective medullary sheaths.

The general result, then, is that in societies, as in living bodies, the increasing mutual dependence of parts, implying an increasingly-efficient regulating system, therefore implies not only developed regulating centres, but also means by which the influences of such centres may be propagated. And we see that as, under one of its aspects, organic evolution shows us more and more efficient internuncial appliances subserving regulation, so, too, does social evolution.

§ 254 One more remarkable and important parallelism has to be set forth. In both kinds of organisms the regulating system, during evolution, divides into two systems, to which is finally added a third partially-independent system, and the differentiations of these systems have common causes in the two cases.

The general law of organization, abundantly illustrated in foregoing chapters, is that distinct duties entail distinct structures; that from the strongest functional contrasts come the greatest structural differences, and that within each of the leading systems of organs first divided from one another in conformity with this principle, secondary divisions arise in conformity with the same principle. The implication is, then, that if in an organism, individual or social, the function of regulation falls into two divisions

that are widely unlike, the regulating apparatus will differentiate into correspondingly-unlike parts carrying on their unlike functions in great measure independently. This we shall find that it does.

The fundamental division in a developed animal, we have seen to be that between the outer system of organs which deal with the environment and the inner system of organs which carry on sustentation. For efficient mutual aid it is requisite not only that the actions of these inner and outer systems, considered as wholes, shall be co-ordinated, but also that each system shall have the actions of its several parts co-ordinated with one another. Prey can be caught or enemies escaped, only if the bones and muscles of each limb work together properly — only if all the limbs effectually co-operate — only if they jointly adjust their motions to the tactual, visual, and auditory impressions; and to combine these many actions of the various sensory and motor agents, there must be a nervous system that is large and complex in proportion as the actions combined are powerful, multiplied, and involved. Like in principle, though much less elaborate, is the combination required among the actions of the sustaining structures. If the masticated food is not swallowed when thrust to the entrance of the gullet, digestion cannot begin; if when food is in the stomach contractions but no secretions take place, or if the pouring out of gastric juices is not accompanied by due rhythmical movements, digestion is arrested; if the great appended glands send into the intestines not enough of their respective products, or send them at wrong times, or in wrong proportions, digestion is left imperfect; and so with the many minor simultaneous and successive processes which go to make up the general function. Hence there must be some nervous structure which, by its inter-nuncial excitations and inhibitions, shall maintain the co-ordination. Now observe how widely unlike are the two kinds of co-ordination to be secured. The external

actions must be quick in their changes. Swift motions, sudden variations of direction, instant stoppages, are needful. Muscular contractions must be exactly adjusted to preserve the balance, achieve the leap, evade the swoop. Moreover, involved combinations are implied, for the forces to be simultaneously dealt with are many and various. Again, the involved combinations, changing from moment to moment, rarely recur; because the circumstances are rarely twice alike. And once more, not the needs of the moment only have to be met, but also the needs of a future more or less distant. Nothing of the kind holds with the internal co-ordinations. The same series of processes has to be gone through after every meal—varying somewhat with the quantity of food, with its quality, and with the degree to which it has been masticated. No quick, special, and exact adaptations are required, but only a general proportion and tolerable order among actions which are not precise in their beginnings, amounts, or endings. Hence for the sustaining organs there arises a regulating apparatus of a strongly contrasted character, which eventually becomes substantially separate. The sympathetic system of nerves, or “nervous system of organic life,” as it is otherwise called, whether or not originally derived from the cerebro-spinal system, is, in developed vertebrates, practically independent. Though perpetually influenced by the higher system which, working the muscular structures, causes the chief expenditure, and though in its turn influencing this higher system, the two carry on their functions apart: they affect one another chiefly by general demands and general checks. Only over the heart and lungs, which are indispensable co-operators with both the sustaining organs and the expending organs, do we find that the superior and inferior nervous systems exercise a divided control. The heart, excited by the cerebro-spinal system in proportion to the supply of blood required for external action, is also excited by the sympathetic when a meal

has made a supply of blood needful for digestion ; and the lungs which (because their expansion has to be effected partly by thoracic muscles belonging to the outer system of organs) largely depend for their movements on cerebro-spinal nerves, are nevertheless also excited by the sympathetic when the alimentary organs are at work. And here, as showing the tendency there is for all these comparatively-constant vital processes to fall under a nervous control unlike that which directs the ever-varying outer processes, it may be remarked that such influences as the cerebro-spinal system exerts upon the heart and lungs, differ greatly from its higher directive actions—are mainly reflex and unconscious. Volition fails to modify the heart's pulsations ; and though an act of will may temporarily increase or decrease respiration, yet the average respiratory movements are not thus changeable, but during waking and sleeping are automatically determined.

To which facts let me add that the broad contrast here illustrated in the highest or vertebrate type, is also illustrated in the higher members of the annulose type. Insects, too, have visceral nervous systems substantially distinguished from the nervous systems which co-ordinate outer actions. And thus we are shown that separation of the two functionally-contrasted regulating systems in animals, is a concomitant of greater evolution.

A parallel contrast of duties produces a parallel differentiation of structures during the evolution of social organisms. Single in low societies as in low animals, the regulating system in high societies as in high animals becomes divided into two systems, which, though they perpetually affect one another, carry on their respective controls with substantial independence. Observe the like causes for these like effects.

Success in conflicts with other societies implies quickness, combination, and special adjustment to ever-varying circumstances. Information of an enemy's movements must be swiftly conveyed, forces must be rapidly drafted to particular spots, supplies fit in kinds and quanti-

ties must be provided; military manœuvres must be harmonized; and to these ends there must be a centralized agency that is instantly obeyed. Quite otherwise is it with the structures carrying on sustentation. Though the actions of these have to be somewhat varied upon occasion, especially to meet war-demands, yet their general action is comparatively uniform. The several kinds of food raised have to meet a consumption that changes within moderate limits only; for clothing the demands are tolerably constant, and alter in their proportions not suddenly but slowly, and so with commodities of less necessary kinds: rapidity, speciality, and exactness, do not characterize the required co-ordination. Hence a place for another kind of regulating system. Such a system we shall find evolves as the sustaining system itself evolves. Let us note its progress.

In early stages the occupations are often such as to prevent division between the control of defensive actions and the control of sustaining actions, because the two are closely allied. Among the Mandans the families joined in hunting and equally divided the spoil; showing us that the war with beasts carried on for joint benefit was so nearly allied to the war with men carried on for joint benefit, that they both remained public affairs. Similarly among the Comanches, the guarding of a tribe's cattle is carried on in the same manner as military guarding might be, and because the community of individual interests in this protection of the cattle from enemies, is like the community of interests in personal protection, unity in the two kinds of government continues. Moreover in simple tribes that are under any kind of headship, what authority exists is unlimited in range, and includes industrial actions as well as others. If there are merely wives for slaves, or if there is a slave-class, the dominant individuals who carry on outer attack and defence, also direct in person what labour is performed; and where a chief having considerable power has arisen, he not only leads in war but orders the daily activi-

ties during peace. The Gonds, the Bhils, the Nagas, the Mishmis, the Kalmucks, and many other simple tribes, show us this identity of the political and industrial governments. A partial advance, leading to some distinction, does not separate the two in a definite way. Thus among the Kukis the rajah claims and regulates work, superintends village removals, and apports the land each family has to clear on a new site; among the Santals the head man partially controls the people's labour, and among the Khonds he acts as chief merchant. In Polynesia we find like facts. The New Zealand chiefs superintend agricultural and building operations; the Sandwich Islanders have a market, in which "the price is regulated by the chief," trade in Tonga also "is evidently under their [the chiefs'] supervision;" and the Kadagan chiefs "settle the price of rice" So again in Celebes, the days for working in the plantations are decided by the political agency, and the people go at beat of gong, so again in East Africa, the times of sowing and harvest depend on the chief's will, and among the Inland Negroes the "market is arranged according to the directions of the chiefs," so again in some parts of Ancient America, as San Salvador, where the cazique directed the plantings, and so again in some parts of America at the present time Those who trade with the Mundrucus "have to distribute their wares amongst the minor chiefs," and then wait some months "for repayment in produce;" and the Patagonians could not sell any of their arms or clothing to Wilkes's party without asking the chief's permission. In other societies, and especially in those which are considerably developed, we find this union of political and industrial rule becoming modified: the agency, otherwise the same, is doubled. Thus "among the Sakarran Dyaks there is a trading chief in addition to the ordinary chief," among the Dahomans there is a commercial chief in Whydah; and there are industrial chiefs in Fiji, where, in other respects, social organization is considerably advanced. At a later

stage the commercial chief passes into the government officer exercising stringent supervision. In Ancient Guatemala a state-functionary fixed the prices in the markets; and in Mexico, agents of the state saw that lands did not remain uncultivated. Facts of this kind introduce us to the stages passed through by European societies. Up to the 10th century each domain in France had its bond, or only partially-free, workmen and artizans, directed by the seigneur and paid by him in meals and goods, between the 11th and 14th centuries the feudal superiors, ecclesiastical or lay, regulated production and distribution to such extent that industrial and commercial licences had to be purchased from them, in the subsequent monarchical stage, it was a legal maxim that "the right to labour is a royal right which the prince may sell and subjects can buy"; and onwards to the time of the Revolution, the country swarmed with officials who authorized occupations, dictated processes, examined products. since which times state-control, though remaining considerable, has greatly diminished, and the adjustments of industry to its needs have been otherwise effected. Still better does our own history show us this progressive differentiation. In the Old English period the heads of guilds were identical with the local political heads—ealdormen, wick-, port-, or burgh-reeves; and the guild was itself in part a political body. Purchases and bargains had to be made in presence of officials; agricultural and manufacturing processes were dictated by law. Dictations of kindred kind, though decreasing, continued to late times. Down to the 16th century there were metropolitan and local councils, politically authorized, which determined prices, fixed wages, etc. But during subsequent generations, restrictions and bounties disappeared; usury laws were abolished; liberty of commercial combination increased.

And now if, with those early stages in which the rudimentary industrial organization is ruled by the chief, and with those intermediate stages in which, as it develops, it

gets a partially-separate political control, we contrast a late stage like our own, characterized by an industrial organization that has become predominant, we find that this has evolved for itself a substantially-independent control. There is now no fixing of prices by the State, no prescribing of methods. Subject to but slight hindrance from a few licences, citizens adopt what occupations they please; buy and sell where they please. The amounts grown and manufactured, imported and exported, are unregulated by laws; improvements are not enforced nor bad processes legislatively interdicted; but men, carrying on their businesses as they think best, are simply subject to the legal restraints that they shall fulfil their contracts and not aggress upon their neighbours. Under what system, then, are their industrial activities adjusted to the requirements? Under an internuncial system through which the various industrial structures receive from one another stimuli or checks caused by rises or falls in the consumptions of their respective products; and through which they jointly receive a stimulus when there is suddenly an extra consumption for war-purposes. Markets in the chief towns, where bargaining settles the prices of grain and cattle, of cottons and woollens, of metals and coal, show men the varying relations of supply and demand; and the reports of their transactions, diffused by the press, prompt each locality to increase or decrease of its special function. Moreover, while the several districts have their activities thus partially regulated by their local centres of business, the metropolis, where all these districts are represented by houses and agencies, has its central markets and its exchange, in which is effected such general averaging of the respective demands of all kinds, present and future, as keeps a due balance among the activities of the several industries. That is to say, there has arisen, in addition to the political regulating system, an industrial regulating system which carries on its co-ordinating function independently—a separate plexus of connected ganglia.

As above hinted, yet a third regulating system, partially distinguishable from the others, arises in both cases. For the prompt adjustment of functions to needs, supplies of the required consumable matters must be rapidly drafted to the places where activities are set up. If an organ in the individual body or in the body politic, suddenly called into great action, could get materials for its nutrition or its secretion, or both, only through the ordinary quiet flow of the distributing currents, its enhanced action would soon flag. That it may continue responding to the increased demand, there must be an extra influx of the materials used in its actions—it must have *credit* in advance of function discharged. In the individual organism this end is achieved by the vaso-motor nervous system. The fibres of this ramify everywhere along with the arteries, which they enlarge or contract in conformity with stimuli sent along them. The general law, as discovered by Ludwig and Lovén, is that when by the nerves of sensation there is sent inwards that impression which accompanies the activity of a part, there is reflected back to the part, along its vaso-motor nerves, an influence by which its minute arteries are suddenly dilated, and at the same time, through the vaso-motor nerves going to all inactive parts, there is sent an influence which slightly constricts the arteries supplying them: thus diminishing the flow of blood where it is not wanted, that the flow may be increased where it is wanted.

In the social organism, or rather in such a developed social organism as our own in modern times, this kind of regulation is effected by the system of banks and associated financial bodies which lend out capital. When a local industry, called into unusual activity by increased consumption of its products, makes demands first of all on local banks, these, in response to the impressions caused by the rising activity conspicuous around them, open more freely those channels for capital which they command; and presently, with further rise of prosperity, the impression

propagated to the financial centres in London produces an extension of the local credit, so that there takes place a dilatation of the in-flowing streams of men and commodities. While, at the same time, to meet this local need for capital, various industries elsewhere, not thus excited, and therefore not able to offer such good interest, get diminished supplies: some constriction of the circulation through them takes place.

This third regulating system, observe, vaso-motor in the one case and monetary in the other, is substantially independent. Evidence exists that there are local vaso-motor centres possessing local control, as there are local monetary centres; and though there seems to be in each case a chief centre, difficult to distinguish amid the other regulating structures with which it is entangled, yet it is functionally separate. Though it may be bound up with the chief regulating system by which outer actions are controlled, it is not subject to it. Volition in the one case cannot alter these local supplies of blood, and legislation in the other, ceasing to make the mischievous perturbations it once did in the movement of capital, now leaves it almost entirely alone: even the State, with the structures under its direct control, standing to the financial corporations in the position of a customer, just as the brain and limbs do to the vaso-motor centres. Nor does it form part of that second regulating system which controls the organs carrying on sustentation, individual or social. The viscera get blood only by permission of these nerves commanding their arteries, and if the outer organs are greatly exerted, the supply is shut off from the inner organs; and similarly the industrial system, with that centralized apparatus which balances its actions, cannot of itself draft capital here or there, but does this indirectly only through the impressions yielded by it to Lombard-street.

§ 255. Thus the increasing mutual dependence, common to both kinds of organization as they evolve, necessitates

a further series of remarkable parallelisms. Co-operation being in either case impossible without appliances by which the co-operating parts shall have their actions adjusted, it inevitably happens that in the body politic, as in the living body, there arises a regulating system; and within itself this differentiates as the sets of organs evolve.

The co-operation most urgent from the outset, is that required for dealing with environing enemies and prey. Hence the first regulating centre, individual and social, is initiated as a means to this co-operation; and its development progresses with the activity of this co-operation. As compound aggregates are formed by integration of simple ones, there arise in either case supreme regulating centres and subordinate ones, and the supreme centres begin to enlarge and complicate. While doubly-compound and trebly-compound aggregates show us further developments in complication and subordination, they show us, also, better internuncial appliances, ending in those which convey instant information and instant command.

To this chief regulating system controlling the organs which carry on outer actions, there is, in either case, added during the progress of evolution, a regulating system for the inner organs carrying on sustentation; and this gradually establishes itself as independent. Naturally it comes later than the other. Preservation of the aggregate, individual or social, primarily depends on escaping destruction from without, which implies complex co-ordination: complete utilization of materials for sustentation being less urgent and implying co-ordination relatively simple. Hence the sustaining system acquires regulating appliances later. And then the third or distributing system, which, though necessarily arising after the others is indispensable to the considerable development of them, eventually gets a regulating apparatus peculiar to itself.

CHAPTER X.

SOCIAL TYPES AND CONSTITUTIONS.

§ 256. A GLANCE at the respective antecedents of individual organisms and social organisms, shows why the last admit of no such definite classification as the first. Through a thousand generations a species of plant or animal leads substantially the same kind of life, and its successive members inherit the acquired adaptations. When changed conditions cause divergences of forms once alike, the accumulating differences arising in descendants only superficially disguise the original identity—do not prevent the grouping of the several species into a genus; nor do wider divergences that began earlier, prevent the grouping of genera into orders and orders into classes. It is otherwise with societies. Hordes of primitive men, dividing and subdividing, do, indeed, show us successions of small social aggregates leading like lives, inheriting such low structures as had resulted, and repeating those structures. But higher social aggregates propagate their respective types in much less decided ways. Though colonies tend to grow like their parents, yet the parent societies are so comparatively plastic, and the influences of new habitats on the derived societies are so great, that divergences of structure are inevitable. In the absence of definite organizations established during the similar lives of many societies de-

scending one from another, there cannot be the precise distinctions implied by complete classification.

Two cardinal kinds of differences there are, however, of which we may avail ourselves for grouping societies in a natural manner. Primarily we may arrange them according to their degrees of composition, as simple, compound, doubly-compound, trebly-compound; and secondarily, though in a less specific way, we may divide them into the predominantly predatory and the predominantly industrial—those in which the organization for offence and defence is most largely developed, and those in which the sustaining organization is most largely developed.

§ 257. We have seen that social evolution begins with small simple aggregates; that it progresses by the clustering of these into larger aggregates; and that after consolidating, such clusters are united with others like themselves into still larger aggregates. Our classification, then, must begin with societies of the first or simplest order.

We cannot in all cases say with precision what constitutes a simple society; for, in common with products of evolution generally, societies present transitional stages which negative sharp divisions. As the multiplying members of a group spread and diverge gradually, it is not always easy to decide when the groups into which they fall become distinct. Here the descendants of common ancestors inhabiting a barren region, have to divide while yet the constituent families are near akin; and there, in a more fertile region, the group may hold together until clusters of families remotely akin are formed: clusters which, diffusing slowly, are held by a common bond that slowly weakens. By and by comes the complication arising from the presence of slaves not of the same ancestry, or of an ancestry but distantly allied; and these, though they may not be political units, must be recognized as units sociologically considered. Then there is the kindred complication arising where an invading tribe

becomes a dominant class. Our only course is to regard as a simple society, one which forms a single working whole unsubjected to any other, and of which the parts co-operate, with or without a regulating centre, for certain public ends. Here is a table, presenting with as much definiteness as may be, the chief divisions and sub-divisions of such simple societies.

SIMPLE SOCIETIES	HEADLESS	{	<i>Nomadic</i> —(hunting) Fuegians, some Australians, Wood-Veddahs, Bushmen, Chepangs and Kusundas of Nepal
		{	<i>Semi-settled</i> —most Esquimaux
		{	<i>Settled</i> —Aiafuras, Land Dyaks of Upper Sarawak River.
	OCCASIONAL HEADSHIP	{	<i>Nomadic</i> —(hunting) some Austlians, Tasmanians.
		{	<i>Semi-settled</i> —some Caribs
		{	<i>Settled</i> —Some Uaupés of the upper Rio Negro
	VAGUE AND UNSTABLE HEADSHIP	{	<i>Nomadic</i> —(hunting) Andamanese, Abipones, Snakes, Chippewayans, (pastoral) some Bedouins
		{	<i>Semi-settled</i> —some Esquimaux, Chinooks, Chippewas (at present), some Kamtschadales, Village Veddahs, Bodo and Dhimáls
		{	<i>Settled</i> —Guana tribes, Mandans, Coroados, New Guinea people, Tannese, Vateans, Dyaks, Todas, Nagas, Karens, Santals
	STABLE HEADSHIP.	{	<i>Nomadic</i> .—
		{	<i>Semi-settled</i> —some Caribs, Patagonians, New Caledonians, Kaffirs
		{	<i>Settled</i> —Guaramis, Pueblos.

On contemplating these uncivilized societies which, though alike as being uncompounded, differ in their sizes and structures, certain generally-associated traits may be

noted. Of the groups without political organization, or with but the vaguest traces of it, the lowest are those small wandering ones which live on the wild food sparsely distributed in forests, over barren tracts, or along sea-shores. Where small simple societies remain without chiefs though settled, it is where circumstances allow them to be habitually peaceful. Glancing down the table we find reason for inferring that the changes from the hunting life to the pastoral, and from the pastoral to the agricultural, favour increase of population, the development of political organization, of industrial organization, and of the arts; though these causes do not of themselves produce these results.

COMPOUND SOCIETIES	OCCASIONAL HEADSHIP	<i>Nomadic</i> —(pastoral) some Bedouins <i>Semi-settled</i> —Tannese <i>Settled</i> —
	UNSTABLE HEADSHIP	<i>Nomadic</i> —(hunting) Dacotahs, (hunting and pastoral) Comanches, (pastoral) Kalmucks. <i>Semi-settled</i> —Ostyaks, Beluchis, Kukus, Bhils, Congo-people (passing into doubly compound), Teutons before 5th century. <i>Settled</i> —Chippewas (in past times), Creeks, Mundiucus, Tupis, Khonds, some New Guinea people, Sumatrans, Malagasy (till recently), Coast Negroes, Inland Negroes, some Abyssinians, Homeric Greeks, Kingdoms of the Heptarchy, Teutons in 5th century, Fiefs of 10th century
	STABLE HEADSHIP	<i>Nomadic</i> —(pastoral) Kirghiz <i>Semi-settled</i> —Bechuanas, Zulus <i>Settled</i> —Uaupés, Fijians (when first visited), New Zealanders, Sandwich Islanders (in Cook's time), Javans, Hottentots, Dahomans, Ashantees, some Abyssinians, Ancient Yucatanese, New Granada people, Honduras people, Chibchas, some town Arabs

The second table, given on the preceding page, contains societies which have passed to a slight extent, or considerably, or wholly, into a state in which the simple groups have their several governing heads subordinated to a general head. The stability or instability alleged of the headship in these cases, refers to the headship of the composite group, and not to the headships of the simple groups. As might be expected, stability of this compound headship becomes more marked as the original unsettled state passes into the completely settled state · the nomadic life obviously making it difficult to keep the heads of groups subordinate to a general head. Though not in all cases accompanied by considerable organization, this coalescence evidently conduces to organization. The completely-settled compound societies are mostly characterized by division into ranks, four, five, or six, clearly marked off, by established ecclesiastical arrangements; by industrial structures that show advancing division of labour, general and local, by buildings of some permanence clustered into places of some size; and by improved appliances of life generally.

In the succeeding table are placed societies formed by the re-compounding of these compound groups, or in which many governments of the types tabulated above have become subject to a still higher government. The first notable fact is that these doubly-compound societies are all completely settled. Along with their greater integration we see in many cases, though not uniformly, a more elaborate and stringent political organization. Where complete stability of political headship over these doubly-compound societies has been established, there is mostly, too, a developed ecclesiastical hierarchy. While becoming more complex by division of labour, the industrial organization has in many cases assumed a caste structure. To a greater or less extent, custom has passed into positive law, and religious observances have grown definite, rigid, and complex.

Towns and roads have become general; and considerable progress in knowledge and the arts has taken place.

DOUBLY COMPOUND SOCIETIES.	OCCASIONAL HEADSHIP	<i>Semi-settled</i> — <i>Settled</i> —Samoans
	UNSTABLE HEADSHIP	<i>Semi-settled</i> — <i>Settled</i> —Tahitians, Tongans, Javans (occasionally), Fijians (since fire arms), Malagasy (in recent times), Athenian Confederacy, Spartan Confede- racy, Teutonic Kingdoms from 6th to 9th cen- turies, Greater Fiefs in France of the 13th century
	STABLE HEADSHIP	<i>Semi-settled</i> — <i>Settled</i> —Iroquois, Aiaucanians, Sandwich Islanders (since Cook's time), Ancient Vera Paz and Bogota peoples, Guatemalans, Ancient Peruvians, Wah- habees (Arab), Omán (Arab), Ancient Egyptian Kingdom, England after the 10th century

There remain to be added the great civilized nations which need no tabular form, since they mostly fall under one head—trebly compound. Ancient Mexico, the Assyrian Empire, the Egyptian Empire, the Roman Empire, Great Britain, France, Germany, Italy, Russia, may severally be regarded as having reached this stage of composition, or perhaps, in some cases, a still higher stage. Only in respect of the stabilities of their governments may they possibly require classing apart—not their political stabilities in the ordinary sense, but their stabilities in the sense of continuing to be the supreme centres of these great aggregates. So defining this trait, the ancient trebly-compound societies have mostly to be classed as unstable; and of the modern, the Kingdom of Italy and the German Empire have to be tested by time.

As already indicated, this classification must not be taken

as more than a rough approximation to the truth. In some cases the data furnished by travellers and others are inadequate; in some cases their accounts are conflicting; in some cases the composition is so far transitional that it is difficult to say under which of two heads it should come. Here the gens or the phratry may be distinguished as a local community; and here these groups of near or remote kinsmen are so mingled with other such groups as practically to form parts of one community. Evidently the like combination of several such small communities, passing through stages of increasing cohesion, leaves it sometimes doubtful whether they are to be regarded as many or as one. And when, as with the larger social aggregates, there have been successive conquests, resulting unions, subsequent dissolutions, and re-unions otherwise composed, the original lines of structure become so confused or lost that it is difficult to class the ultimate product.

But there emerge certain generalizations which we may safely accept. The stages of compounding and re-compounding have to be passed through in succession. No tribe becomes a nation by simple growth, and no great society is formed by the direct union of the smallest societies. Above the simple group the first stage is a compound group inconsiderable in size. The mutual dependence of parts which constitutes it a working whole, cannot exist without some development of lines of intercourse and appliances for combined action; and this must be achieved over a narrow area before it can be achieved over a wide one. When a compound society has been consolidated by the co-operation of its component groups in war under a single head—when it has simultaneously differentiated somewhat its social ranks and industries, and proportionately developed its arts, which all of them conduce in some way to better co-operation, the compound society becomes practically a single one. Other societies of the same order, each having similarly reached a stage of organization alike required and

made possible by this co-ordination of actions throughout a larger mass, now form bodies from which, by conquest or by federation in war, may be formed societies of the doubly-compound type. The consolidation of these has again an accompanying advance of organization distinctive of it—an organization for which it affords the scope and which makes it practicable—an organization having a higher complexity in its regulative, distributive, and industrial systems. And at later stages, by kindred steps, arise the still larger aggregates having still more complex structures. In this order has social evolution gone on, and only in this order does it appear to be possible. Whatever imperfections and incongruities the above classification has, do not hide these general facts—that there are societies of these different grades of composition, that those of the same grade have general resemblances in their structures; and that they arise in the order shown.

§ 258. We pass now to the classification based on unlikenesses between the kinds of social activity which predominate, and on the resulting unlikenesses of organization. The two social types thus essentially contrasted are the predatory and the industrial.

It is doubtless true that no definite separation of these can be made. Excluding a few simple groups such as the Esquimaux, inhabiting places where they are safe from invasion, all societies, simple and compound, are occasionally or habitually in antagonism with other societies; and, as we have seen, tend to evolve structures for carrying on offensive and defensive actions. At the same time sustentation is necessary; and there is always an organization, slight or decided, for achieving it. But while the two systems in social organisms, as in individual organisms, co-exist in all but the rudimentary forms, they vary immensely in the ratios they bear to one another. In some cases the structures carrying on external actions are largely

developed; the sustaining system exists solely for their benefit; and the activities are militant. In other cases there is predominance of the structures carrying on sustentation; offensive and defensive structures are maintained only to protect them; and the activities are industrial. At the one extreme we have those warlike tribes which, subsisting mainly by the chase, make the appliances for dealing with enemies serve also for procuring food, and have sustaining systems represented only by their women, who are their slave-classes; while, at the other extreme we have the type, as yet only partially evolved, in which the agricultural, manufacturing, and commercial organizations form the chief part of the society, and, in the absence of external enemies, the appliances for offence and defence are either rudimentary or absent. Transitional as are nearly all the societies we have to study, we may yet clearly distinguish the constitutional traits of these opposite types, characterized by predominance of the outer and inner systems respectively.

Having glanced at the two thus placed in contrast, it will be most convenient to contemplate each by itself.

- § 259 As before pointed out, the militant type is one in which the army is the nation mobilized while the nation is the quiescent army, and which, therefore, acquires a structure common to army and nation. We shall most clearly understand its nature by observing in detail this parallelism between the military organization and the social organization at large.

Already we have had ample proof that centralized control is the primary trait acquired by every body of fighting men, be it horde of savages, group of brigands, or mass of soldiers. And this centralized control, necessitated during war, characterizes the government during peace. Among the uncivilized there is a marked tendency for the military chief to become also the political head (the medicine man

being his only competitor) ; and in a conquering race of savages his political headship becomes fixed. Among semi-civilized the conquering commander and the despotic king are the same; and they remain the same among the civilized down to late times. The connexion is well shown where in the same race, we find a contrast in the habitual activities and in the forms of government. Thus the powers of the patriarchal chiefs of Kaffir tribes are not great, but the Zulus, who have become a conquering division of the Kaffirs, are under an absolute monarch. Of advanced savages the Fijians may be named as well showing this relation between habitual war and despotic rule. the persons and property of subjects are entirely at the king's or chief's disposal. We have seen that it is the same in the warlike African states, Dahomey and Ashantee. The Ancient Mexicans, again, whose highest profession was that of arms, and whose eligible prince became king only by feats in war, had an autocratic government, which, according to Clavigero, became more stringent as the territory was enlarged by conquest. Similarly, the unmitigated despotism under which the Peruvians lived, had been established during the spread of the Ynca conquests. And that race is not the cause, we are shown by this recurrence in Ancient America of a relation so familiar in ancient states of the Old World.

The absoluteness of a commander-in-chief goes along with absolute control exercised by his generals over their subordinates, and by their subordinates over the men under them: all are slaves to those above and despots to those below. This structure repeats itself in the accompanying social arrangements. There are precise gradations of rank in the community and complete submission of each rank to the ranks above it. We see this in the society already instanced as showing among advanced savages the development of the militant type. In Fiji six classes are enumerated, from king down to slaves, as sharply marked off. Similarly in Madagascar, where

despotism has been in late times established by war, there are several grades and castes. Among the Dahomans, given in so great a degree to bloodshed of all kinds, "the army, or, what is nearly synonymous, the nation," says Burton, "is divided, both male and female, into two wings;" and then, of the various ranks enumerated, all are characterized as legally slaves of the king. In Ashantee, too, where his officers are required to die when the king dies, we have a kindred condition. Of old, among the aggressive Persians, grades were strongly marked. So was it in warlike Ancient Mexico: besides three classes of nobility, and besides the mercantile classes, there were three agricultural classes down to the serfs—all in precise subordination. In Peru, also, below the Ynca, there were grades of nobility—lords over lords. Moreover, according to Garcilasso, in each town the inhabitants were registered in decades under a decurion, five of these under a superior, two such under a higher one, five of these centurions under a head, two of these under one who thus ruled a thousand men, and for every ten thousand there was a governor of Ynca race. the political rule being thus completely regimental. Till lately, another illustration was furnished by Japan. That there were kindred, if less elaborate, structures in ancient militant states of the Old World, scarcely needs saying; and that like structures were repeated in mediæval times, when a large nation like France had under the monarch several grades of feudal lords, vassals to those above and suzerains to those below, with serfs under the lowest, again shows us that everywhere the militant type has sharply-marked social gradations as it has sharply-marked military gradations.

Corresponding to this natural government there is a like form of supernatural government. I do not mean merely that in the ideal other-worlds of militant societies, the ranks and powers are conceived as like those of the real world around, though this also is to be noted, but I refer to the militant character of the religion.

Ever in antagonism with other societies, the life is a life of enmity and the religion a religion of enmity. The duty of blood-revenge, most sacred of all with the savage, continues to be the dominant duty as the militant type of society evolves. The chief, baulked of his vengeance, dies enjoining his successors to avenge him; his ghost is propitiated by fulfilment of his commands, the slaying of his enemies becomes the highest action; trophies are brought to his grave in token of fulfilment, and, as tradition grows, he becomes the god worshipped with bloody sacrifices. Everywhere we find evidence. The Fijians offer the bodies of their victims killed in war to the gods before cooking them. In Dahomey, where the militant type is so far developed that women are warriors, men are almost daily sacrificed by the monarch to please his dead father, and the ghosts of old kings are invoked for aid in war by blood sprinkled on their tombs. The war-god of the Mexicans (originally a conqueror), the most revered of their gods, had his idol fed with human flesh: wars being undertaken to supply him with victims. And similarly in Peru, where there were habitual human sacrifices, men taken captive were immolated to the father of the Yncas, the Sun. How militant societies of old in the East similarly evolved deities who were similarly propitiated by bloody rites, needs merely indicating. Habitually their mythologies represent gods as conquerors, habitually their gods are named "the strong one," "the destroyer," "the avenger," "god of battles," "lord of hosts," "man of war," and so forth. As we read in Assyrian inscriptions, wars were commenced by their alleged will; and, as we read elsewhere, peoples were massacred wholesale in professed obedience to them. How its theological government, like its political government, is essentially military, we see even in late and qualified forms of the predatory type; for down to the present time absolute subordination, like that of soldier to commander, is the supreme virtue, and disobedience the crime for which eternal torture is threat-

ened. Similarly with the accompanying ecclesiastical organization. Very generally where the militant type is highly developed, the political head and ecclesiastical head are identical—the king, chief descendant of his ancestor who has become a god, is also chief propitiator of him. It was so in Ancient Peru; and in Tezcuco and Tlacopan (Mexico) the high-priest was the king's second son. The Egyptian wall-paintings show us kings performing sacrifices, as do also the Assyrian. Babylonian records harmonize with Hebrew traditions in telling us of priest-kings. In Lydia it was the same: Croesus was king and priest. In Sparta, too, the kings, while military chiefs, were also high priests; and a trace of the like original relation existed in Rome. A system of subordination essentially akin to the military, has habitually characterized the accompanying priest-hoods. The Fijians have an hereditary priesthood forming a hierarchy. In Tahiti, where the high-priest was royal, there were grades of hereditary priests belonging to each social rank. In Ancient Mexico the priest-hoods of different gods had different ranks, and there were three ranks within each priesthood; and in Ancient Peru, besides the royal chief priest, there were priests of the conquering race set over various classes of inferior priests. A like type of structure, with subjection of rank to rank, has characterized priest-hoods in the ancient and modern belligerent societies of the Old World. The like mode of government is traceable throughout the sustaining organization also, so long as the social type remains predominantly militant. Beginning with simple societies in which the slave-class furnishes the warrior-class with necessities of life, we have already seen that during subsequent stages of evolution the industrial part of the society continues to be essentially a permanent commissariat, existing solely to supply the needs of the governmental-military structures, and having left over for itself only enough for bare maintenance. Hence the develop-

ment of political regulation over its activities, has been in fact the extension throughout it of that military rule which, as a permanent commissariat, it naturally had. An extreme instance is furnished us by the Ancient Peruvians, whose political and industrial governments were identical—whose kinds and quantities of labour for every class in every locality, were prescribed by laws enforced by state officers—who had work legally dictated even for their young children, their blind, and their lame, and who were publicly chastised for idleness regimental discipline being applied to industry just as our modern advocate of strong government would have it now. The late Japanese system, completely military in origin and nature, similarly permeated industry: great and small things—houses, ships, down even to mats—were prescribed in their structures. In the warlike monarchy of Madagascar the artizan classes are all in the employ of government, and no man can change his occupation or locality, under pain of death. Without multiplication of cases, these typical ones, reminding the reader of the extent to which even in modern fighting states industrial activities are officially regulated, will sufficiently show the principle.

Not industry only, but life at large, is, in militant societies, subject to kindred discipline. Before its recent collapse the government of Japan enforced sumptuary laws on each class, mercantile and other, up to the provincial governors, who must rise, dine, go out, give audience, and retire to rest at prescribed hours; and the native literature specifies regulations of a scarcely credible minuteness. In Ancient Peru, officers “minutely inspected the houses, to see that the man, as well as his wife, kept the household in proper order, and preserved a due state of discipline among their children”; and householders were rewarded or chastised accordingly. Among the Egyptians each person had, at fixed intervals, to report to a local officer his name, abode, and mode of living. Sparta, too, yields

an example of a society specially organized for offence and defence, in which the private conduct of citizens in all its details was under public control enforced by spies and censors. Though regulations so stringent have not characterized the militant type in more recent ages, yet we need but recall the laws regulating food and dress, the restraints on locomotion, the prohibitions of some games and dictation of others, to indicate the parallelism of principle. Even now where the military organization has been kept in vigour by military activities, as in France, we are shown by the peremptory control of journals and suppression of meetings, by the regimental uniformity of education, by the official administration of the fine arts, the way in which its characteristic regulating system ramifies everywhere. And then, lastly, is to be noted the theory concerning the relation between the State and the individual, with its accompanying sentiment. This structure which adapts a society for combined action against other societies, is associated with the belief that its members exist for the benefit of the whole and not the whole for the benefit of its members. As in an army the liberty of the soldier is denied and only his duty as a member of the mass insisted on; as in a permanently encamped army like the Spartan nation, the laws recognized no personal interests, but patriotic ones only; so in the militant type throughout, the claims of the unit are nothing and the claims of the aggregate everything. Absolute subjection to authority is the supreme virtue and resistance to it a crime. Other offences may be condoned, but disloyalty is an unpardonable offence. If we take the sentiments of the sanguinary Fijians, among whom loyalty is so intense that a man stands unbound to be knocked on the head, himself saying that what the king wills must be done; or those of the Dahomans, among whom the highest officials are the king's slaves, and on his decease his women sacrifice one another that they may all follow him; or those of the Ancient Peruvians, among whom with a dead

Ynca, or great curaca, were buried alive his favourite attendants and wives that they might go to serve him in the other world; or those of the Ancient Persians, among whom a father, seeing his innocent son shot by the king in pure wantonness, "felicitated" the king "on the excellence of his archery," and among whom bastinadoed subjects "declared themselves delighted because his majesty had condescended to recollect them", we are sufficiently shown that in this social type, the sentiment which prompts the assertion of personal rights in opposition to the ruling power, scarcely exists.

Thus the trait characterizing the militant structure throughout, is that its units are coerced into their various combined actions. As the soldier's will is so suspended that he becomes in everything the agent of his officer's will; so is the will of the citizen in all transactions, private and public, overruled by that of the government. The co-operation by which the life of the militant society is maintained, is a *compulsory* co-operation. The social structure adapted for dealing with surrounding hostile societies is under a centralized regulating system, to which all the parts are completely subject; just as in the individual organism the outer organs are completely subject to the chief nervous centre.

§ 260. The traits of the industrial type have to be generalized from inadequate and entangled data. Antagonism more or less constant with other societies, having been almost everywhere and always the condition of each society, a social structure fitted for offence and defence exists in nearly all cases, and disguises the structure which social sustentation alone otherwise originates. Such conception as may be formed of it has to be formed from what we find in the few simple societies that have been habitually peaceful, and in the advanced compound societies which, though once habitually militant, have become gradually less so.

Already I have referred to the chiefless Arafuras, living

in "peace and brotherly love with one another," of whom we are told that "they recognize the rights of property in the fullest sense of the word, without there being any authority among them than the decisions of their elders, according to the customs of their forefathers": that is, there has grown up a recognition of mutual claims and personal rights, with voluntary submission to a tacitly-elected representative government formed of the most experienced. Among the Todas who "lead a peaceful, tranquil life," disputes are "settled either by arbitration" or by "a council of five." The amiable Bodo and Dhimals, said to be wholly unmilitary, display an essentially-free social form. They have nothing but powerless head men, and are without slaves or servants; but they give mutual assistance in clearing ground and house-building there is voluntary exchange of services—giving of equivalents of labour. The Mishmis again, described as quiet, inoffensive, not warlike, and only occasionally uniting in self-defence, have scarcely any political organization. Their village communities under merely nominal chiefs acknowledge no common chief of the tribe, and the rule is democratic crimes are judged by an assembly. Naturally few, if any, cases occur in which societies of this type have evolved into larger societies without passing into the predatory type; for, as we have seen, the consolidation of simple aggregates into a compound aggregate habitually results from war, defensive or offensive, which, if continued, evolves a centralized authority with its coercive institutions. The Pueblos, however, industrious and peaceful agriculturists, who, building their unique villages, or compound houses containing 2,000 people, in such ways as to "wall out black barbarism," fight only when invaded, show us a democratic form of government: "the governor and his council are elected annually by the people." The case of Samoa, too, may be named as showing to some extent how, in one of these compound communities where the warlike

activity is now not considerable, decline in the rigidity of political control has gone along with some evolution of the industrial type. Chiefs and minor heads, partly hereditary partly elective, are held responsible for the conduct of affairs; there are village-parliaments and district-parliaments. Along with this we find a considerably-developed sustaining organization separate from the political—masters who have apprentices, employ journeymen, and pay wages; and when payment for work is inadequate, there are even strikes upheld by a tacit trades-unionism.

Passing to more evolved societies it must be observed, first, that the distinctive traits of the industrial type do not become marked, even where the industrial activity is considerable, so long as the industrial government remains identified with the political. In Phœnicia, for example, "the foreign wholesale trade seems to have belonged mostly to the state, the kings, and the nobles. * * * Ezekiel describes the king of Tyrus as a prudent commercial prince, who finds out the precious metals in their hidden seats, enriches himself by getting them, and increases these riches by further traffic." Clearly, where the political and military heads have thus themselves become the heads of the industrial organization, the traits distinctive of it are prevented from showing themselves. Of ancient societies to be named in connexion with the relation between industrial activities and free institutions, Athens will be at once thought of; and, by contrast with other Greek states, it showed this relation as clearly as can be expected. Up to the time of Solon all these communities were under either oligarchs or despots. The rest of them, in which war continued to be the honoured occupation while industry was despised, retained this political type; but in Athens, where industry was regarded with comparative respect, where it was encouraged by Solon, and where immigrant artizans found a home, there commenced an industrial organization which, gradually growing, distinguished the Athenian society

from adjacent societies, as it was distinguished from them by those democratic institutions that simultaneously developed.

Turning to later times, the relation between a social *régime* predominantly industrial and a less coercive form of rule, is shown us by the Hanse Towns, by the towns of the Low Countries out of which the Dutch Republic arose, and in high degrees by ourselves, by the United States, and by our colonies. Along with wars less frequent and these carried on at a distance, and along with an accompanying growth of agriculture, manufactures, and commerce, beyond that of continental states more military in habit, there has gone in England a development of free institutions. As further implying that the two are related as cause and consequence, there may be noted the fact that the regions whence changes towards greater political liberty have come, are the leading industrial regions, and that rural districts, less characterized by constant trading transactions, have retained longer the earlier type with its appropriate sentiments and ideas.

In the form of ecclesiastical government we see parallel changes. Where the industrial activities and structures evolve, this branch of the regulating system, no longer as in the predatory type a rigid hierarchy, little by little loses strength, while there grows up one of a different kind: sentiments and institutions both relaxing. Right of private judgment in religious matters gradually establishes itself along with establishment of political rights. In place of a uniform belief imperatively enforced, there come multiform beliefs voluntarily accepted; and the ever-multiplying bodies espousing these beliefs, instead of being governed despotically, govern themselves after a manner more or less representative. Military conformity coercively maintained gives place to a varied non-conformity maintained by willing union.

The industrial organization itself, which thus as it becomes predominant affects all the rest, of course shows us in an especial degree this change of structure.

From the primitive predatory condition under which the master maintains slaves to work for him, there is a transition through stages of increasing freedom to a condition like our own, in which all who work and employ, buy and sell, are entirely independent; and in which there is an unchecked power of forming associations that rule themselves on democratic principles. Combinations of workmen and counter-combinations of employers, no less than political societies and leagues for carrying on this or that agitation, show us the representative mode of government; which characterizes also every joint-stock company for mining, banking, railway-making, or other commercial enterprise.

Further we see that as in the predatory type the military mode of regulation ramifies into all minor departments of social activity, so here does the industrial mode of regulation. Multitudinous objects are achieved by spontaneously-evolved combinations of citizens governed representatively. The tendency to this kind of organization is so ingrained that for every proposed end the proposed means is a society ruled by an elected committee headed by an elected chairman—philanthropic associations of multitudinous kinds, literary institutions, libraries, clubs, bodies for fostering the various sciences and arts, etc., etc.

Along with all which traits there go sentiments and ideas concerning the relation between the citizen and the State, opposite to those accompanying the predatory type. In place of the doctrine that the duty of obedience to the governing agent is unqualified, there arises the doctrine that the will of the citizens is supreme and the governing agent exists merely to carry out their will. Thus subordinated in authority, the regulating power is also restricted in range. Instead of having an authority extending over actions of all kinds, it is shut out from large classes of actions. Its control over ways of living in respect to food, clothing, amusements, is repudiated; it is not allowed to dictate modes of production nor

to regulate trade Nor is this all. It becomes a duty to resist irresponsible government, and also to resist the excesses of responsible government. There arises a tendency in minorities to disobey even the legislature deputed by the majority, when it interferes in certain ways; and their oppositions to laws they condemn as inequitable, from time to time cause abolition of them. With which changes of political theory and accompanying sentiment, is joined a belief, implied or avowed, that the combined actions of the social aggregate have for their end to maintain the conditions under which individual lives may be satisfactorily carried on, in place of the old belief that individual lives have for their end the maintenance of this aggregate's combined actions.

These pervading traits in which the industrial type differs so widely from the predatory type, originate in those relations of individuals implied by industrial activities, which are wholly unlike those implied by predatory activities. All trading transactions, whether between masters and workmen, buyers and sellers of commodities, or professional men and those they aid, are effected by free exchange. For some benefit which A's occupation enables him to give, B willingly yields up an equivalent benefit if not in the form of something he has produced, then in the form of money gained by his occupation. This relation, in which the mutual rendering of services is unforced and neither individual subordinated, becomes the predominant relation throughout society in proportion as the industrial activities predominate. Daily determining the thoughts and sentiments, daily disciplining all in asserting their own claims while forcing them to recognize the correlative claims of others, it produces social units whose mental structures and habits mould social arrangements into corresponding forms. There results this type characterized throughout by that same individual freedom which every commercial transaction implies. The co-operation by which the multi-

form activities of the society are carried on, becomes a *voluntary* co-operation. And while the developed sustaining system which gives to a social organism the industrial type, acquires for itself, like the developed sustaining system of an animal, a regulating apparatus of a diffused or uncentralized kind, it tends also to decentralize the primary regulating apparatus, by making it derive from more numerous classes its deputed powers.

§ 261. Necessarily the essential traits of these two social types are in most cases obscured, both by the antecedents and by the co-existing circumstances. Every society has been at each past period, and is at present, conditioned in a way more or less unlike the ways in which others have been and are conditioned. Hence the production of structures characterizing one or other of these opposed types, is, in every instance, furthered, or hindered, or modified, in a special manner. Observe the several kinds of causes.

There is, first, the deeply-organized character of the particular race, coming down from those pre-historic times during which the diffusion of mankind and differentiation of the varieties of man, took place. Very difficult to change, this must in every case qualify differently the tendency towards assumption of either type.

There is, next, the effect due to the immediately-preceding mode of life and social type. Nearly always the society we have to study contains decayed institutions and habits belonging to an ancestral society otherwise circumstanced; and these pervert more or less the effects of circumstances then existing

Again, there are the peculiarities of the habitat in respect of contour, soil, climate, flora, fauna, severally affecting in one mode or other the activities, whether predatory or industrial; and severally hindering or aiding, in some special way, the development of either type.

Yet further, there are the complications caused by the

particular organizations and practices of surrounding societies. For, supposing the amount of offensive or defensive action to be the same, the nature of it depends in each case on the nature of the antagonist action; and hence its reactive effects on structure vary with the character of the antagonist. Add to this that direct imitation of adjacent societies is a factor of some moment.

There remains to be named an element of complication more potent perhaps than any of these—one which of itself often goes far to determine the type as predatory, and which in every case profoundly modifies the social arrangements. I refer to the mixture of races caused by conquest or otherwise. We may properly treat of it separately under the head of social constitution—not, of course, constitution politically understood, but constitution understood as referring to the relative homogeneity or heterogeneity of the units constituting the social aggregate.

§ 262. Inevitably as the nature of the aggregate, partially determined by environing conditions, is in other respects determined by the natures of its units, where its units are of diverse natures the degrees of contrast between the two or more kinds of them, and the degrees of union between them, must greatly affect the results. Are they of unallied races or of races near akin; and do they remain separate or do they mix?

If units of two kinds are joined in the same society, their respective tendencies to evolve structures more or less unlike in character, must modify the product. And the special modification will in every case further or hinder the evolution of one or the other social type. Clearly where it has happened that a conquering race, continuing to govern a subject race, has developed the predatory regulating system throughout the whole social structure, and for ages habituated its units to compulsory co-operation—where it has also happened that the correla-

tive ecclesiastical system with its appropriate cult, has given to absolute subordination the religious sanction—and especially where, as in China, each individual is moulded by the governing power and stamped with the appropriate ideas of duty which it is heresy to question; it becomes impossible for any considerable change to be wrought in the social structure by other influences. It is the law of all organization that as it becomes complete it becomes rigid. Only where incompleteness implies a remaining plasticity, is it possible for the type to develop from the original predatory form to the form which industrial activity generates.

Especially where the two races, contrasted in their natures, do not mix, social co-operation implies a compulsory regulating system—the military form of structure which the dominant impose, ramifies throughout. Ancient Peru furnished an extreme case; and the Ottoman empire may be instanced. Social constitutions of this kind, in which aptitudes for forming unlike structures co-exist, are manifestly in states of unstable equilibrium. Any considerable shock dissolves the organization, and in the absence of unity of tendency, re-establishment of it is difficult if not impossible.

In cases where the conquering and conquered, though widely unlike, intermarry extensively, a kindred effect is produced in another way. The conflicting tendencies towards different social types, instead of existing in separate individuals, now exist in the same individual. The half-caste, inheriting from one line of ancestry proclivities adapted to one set of institutions, and from the other line of ancestry proclivities adapted to another set of institutions, is not fitted for either. He is a unit whose nature has not been moulded by any social type, and therefore cannot, with others like himself, evolve any social type. Modern Mexico and the South American Republics, with their perpetual revolutions, show us the result.

It is observable, too, that where races of strongly-contrasted natures have mixed more or less,

or, remaining but little mixed, occupy adjacent areas subject to the same government, the equilibrium maintained so long as that government keeps up the coercive form, shows itself to be unstable when the coercion relaxes. Spain with its diverse peoples, Basque, Celtic, Gothic, Moorish, Jewish, partially mingled and partially localized, shows us this result.

Small differences, however, seem advantageous. Sundry instances point to the conclusion that a society formed from nearly-allied peoples of which the conquering eventually mingles with the conquered, is relatively well fitted for progress. From their fusion results a community which, determined in its leading traits by the character common to the two, is prevented by their differences of character from being determined in its minor traits—is left capable of taking on new arrangements determined by new influences. medium plasticity allows those changes of structure constituting advance in heterogeneity. One example is furnished us by the Hebrews, who, notwithstanding their boasted purity of blood, resulted from a mixing of many Semitic varieties in the country east of the Nile, and who, both in their wanderings and after the conquest of Palestine, went on amalgamating kindred tribes. Another is supplied by the Athenians, whose progress had for antecedent the mingling of numerous immigrants from other Greek states with the Greeks of the locality. The fusion by conquest of the Romans with other Aryan tribes, Sabini, Sabelli, and Samnites, preceded the first ascending stage of the Roman civilization. And our own country, peopled by different divisions of the Aryan race, and mainly by varieties of Scandinavians, again illustrates this effect produced by the mixture of units sufficiently alike to co-operate in the same social system, but sufficiently unlike to prevent that social system from becoming forthwith definite in structure.

Admitting that the evidence where so many causes are in operation cannot be satisfactorily disentangled, and claiming

only probability for these inductions respecting social constitutions, it remains to point out their analogy to certain inductions respecting the constitutions of individual living things. Between organisms widely unlike in kind, no progeny can arise: the physiological units contributed by them respectively to form a fertilized germ, cannot work together so as to produce a new organism. Evidently as, while multiplying, the two classes of units tend to build themselves into two different structures, their conflict prevents the formation of any structure. If the two organisms are less unlike in kind—belonging, say, to the same genus though to different species—the two structures which their two groups of physiological units tend to build up, being tolerably similar, they can, and do, co-operate in making an organism that is intermediate. But this, though it will work, is imperfect in its latest-evolved parts. there results a mule incapable of propagating. If, instead of different species, remote varieties are united, the intermediate organism is not infertile, but many facts suggest the conclusion that infertility results in subsequent generations. the incongruous working of the united structures, though longer in showing itself, comes out ultimately. And then, finally, if instead of remote varieties, varieties nearly allied are united, a permanently-fertile breed results; and while the slight differences of the two kinds of physiological units are not such as to prevent harmonious co-operation, they are such as conduce to plasticity and unusually vigorous growth.

Here, then, seems a parallel to the conclusion indicated above, that hybrid societies are imperfectly organizable—cannot grow into forms completely stable; while societies that have been evolved from mixtures of nearly-allied varieties of man, can assume stable structures, and have an advantageous modifiability

§ 263. We class societies, then, in two ways; both

having to be kept in mind when interpreting social phenomena.

First, they have to be arranged in the order of their integration, as simple, compound, doubly-compound, trebly-compound. And along with the increasing degrees of evolution implied by these ascending stages of composition, we have to recognize the increasing degrees of evolution implied by growing heterogeneity, general and local.

Much less definite is the division to be made among societies according as one or other of their great systems of organs is supreme. Omitting those lowest types which show no differentiations at all, we have but few exceptions to the rule that each society has structures for carrying on conflict with other societies and structures for carrying on sustentation; and the ratios between these admitting of all gradations, it results that no specific classification can be based on their relative developments. Nevertheless, as the predatory type, characterized by predominance of the one, is framed on the principle of compulsory co-operation, while the industrial type, characterized by predominance of the other, is framed on the principle of voluntary co-operation, the two types, when severally evolved to their extreme forms, are diametrically opposed; and the contrasts between their traits are among the most important with which Sociology has to deal.

Were this the fit place, some pages might be added respecting a possible future social type, differing as much from the industrial as this does from the predatory—a type which, having a sustaining system more fully developed than any we know at present, will use the products of industry neither for maintaining a predatory organization nor exclusively for material aggrandizement; but will devote them to the carrying on of higher activities. As the contrast between the predatory and the industrial types, is indicated by inverting the belief that individuals exist for the benefit of the State into the belief that the State exists for the

benefit of individuals; so the contrast between the industrial type and the type likely to be evolved from it, is indicated by the inversion of the belief that life is for work into the belief that work is for life. But we are here concerned with inductions derived from societies that have been and are, and cannot enter upon speculations respecting societies that may be. Merely naming as a sign, the multiplication of institutions and appliances for intellectual and æsthetic culture and for kindred activities not of a directly life-sustaining kind, but of a kind having gratification for their immediate purpose, I can here say no more.

Returning from this parenthetical suggestion, there remains the remark that to the complications caused by the crossings of these two classifications, have to be added the complications caused by the unions of races widely unlike or little unlike; which here mix not at all, there partially, and in other cases wholly. Respecting these kinds of constitutions, we have considerable warrant for concluding that the hybrid kind, essentially unstable, admits of being organized only on the principle of compulsory co-operation; since units much opposed in their natures cannot work together spontaneously. While, conversely, the kind characterized by likeness in its units is relatively stable, and under fit conditions may evolve into the industrial type. especially if the likeness is qualified by slight differences.

CHAPTER XI

SOCIAL METAMORPHOSES

§ 264. VERIFICATION of the general view set forth in the last chapter, is gained by observing the alterations of social structures that follow alterations of social activities; and here again we find analogies between social organisms and individual organisms. In both there is metamorphosis consequent on change from a wandering life to a settled life; in both there is metamorphosis consequent on change from a life exercising mainly the inner or sustaining system, to a life exercising the outer or expending system, and in both there is a reverse metamorphosis.

The young of many invertebrate creatures, annulose and molluscous, pass through an early stage during which they move about actively. Presently comes a settling down in some fit habitat, a dwindling away of the locomotive organs and the guiding appliances they had, a growth of those other organs now needed for appropriating such food as the environment supplies, and a rapid enlargement of the sustaining system. A transformation opposite in nature, is familiarized to us by the passage from larva to imago in insects. Surrounded by food, the future moth or fly develops almost exclusively its sustaining system; has but rudimentary limbs or none at all, and has proportionately imperfect senses. After growing immensely and accumulating much plastic material, it begins to un-

fold its external organs with their appropriate regulating apparatus, while its organs of nutrition decrease ; and it thus fits itself for active dealings with environing existences.

The one truth, common to these opposite kinds of metamorphoses, which here concerns us, is that the two great systems of structures for carrying on outer activities and inner activities respectively, dwindle or develop according to the life which the aggregate pursues. Though in the absence of definite social types fixed by inheritance, we cannot have social metamorphoses thus definitely related to changes of life arising in definite order, analogy implies that which we have already seen reason to infer, namely, that the outer and inner structures with their regulating systems, will severally increase or diminish according as the activities become more militant or more industrial.

§ 265. Before observing how metamorphoses are caused, let us observe how they are hindered. I have implied above that where it has not derived a specific structure from a line of ancestral societies leading similar lives, a society cannot undergo metamorphoses in a precise manner and order the effects of surrounding influences predominate over the effects of inherited tendencies. Here may fitly be pointed out the converse truth, that where many societies, descending one from another, have pursued like careers, there results a type so far settled in its cycle of development, maturity, and decay, that it resists metamorphosis.

Uncivilized tribes in general may be cited in illustration : they show little tendency to alter their social activities and structures under changed circumstances, but die out rather than adapt themselves. Even with superior varieties of men this happens ; as, for example, with the wandering Arab tribes. Modern Bedouins show us a form of society which, so far as the evidence enables us to judge, has remained substantially the same these 3000 years or more, spite of contact with adjacent civilizations, and there is evidence

that in some Semites the nomadic type had, even in ancient times, become so ingrained as to express itself in the religion. Thus we have the Rechabite injunction—"Neither shall ye build house, nor sow corn, nor plant vineyard, nor have any, but all your days ye shall dwell in tents;" and Mr. E. W. Robertson points out that—

"One of the laws of the ancient Nabataean confederacy made it a capital crime to sow corn, to build a house, or plant a tree * * * It was a fixed and settled principle in the nomad to reduce the country he invaded to the condition of a waste and open pasturage * * * He looked upon such a course as a religious duty."

Change from the migratory to the settled state, hindered by persistence of the primitive social type, is also otherwise hindered. Describing the Hill Tribes on the Kuladyne River, Arracan, Lieut. Latter says —

"A piece of ground rarely yields more than one crop, in each successive year other spots are in like manner chosen, till all those around the village are exhausted, a move is then made to another locality, fresh habitations are erected, and the same process gone through. These migrations occur about every third year, and they are the means by which long periods of time are calculated, thus a Tougtha will tell you that such and such an event occurred so many migrations since"

And this holds generally of these Indian Hill Tribes. Evidently a practice of this kind, prompted partly by the restlessness inherited from ancestral nomads, is partly due to undeveloped agriculture—to the absence of those means by which in a thickly-peopled country the soil is made permanently fertile. This intermediate state between the wandering and the stationary is common throughout Africa. It is remarked that "society in Africa is a plant of herbaceous character, without any solid or enduring stem, rank in growth, rapid in decay, and admitting of being burned down annually without any diminution of its general productiveness." Reade tells us that the natives of Equatorial Africa are perpetually changing the sites of their villages. Similarly of the Bechuanas, Thompson says—"Their towns are often so considerable as to contain many

thousand people, and yet they are removable at the caprice of the chief, like an Arab camp." And a like state of things existed in primitive Europe families and small communities in each tribe, migrated from one part of the tribal territory to another. Thus from the temporary villages of hunters like the North American Indians, and from the temporary encampments of pastoral hordes, the transition to settled agricultural communities is very gradual the earlier mode of life, frequently resumed, is but slowly outgrown.

When studying the social metamorphoses that follow altered social activities, we have therefore to bear in mind those resistances to change which the inherited social type offers, and also those resistances to change caused by partial continuance of old conditions. Further, we may anticipate reversion if the old conditions begin again to predominate.

§ 266 Of chief interest to us here are the transformations of the militant into the industrial and the industrial into the militant. And especially we have to note how the industrial type, partially developed in a few cases, retrogrades towards the militant type if international conflicts recur.

When comparing these two types we saw how the compulsory co-operation which military activity necessitates, is contrasted with the voluntary co-operation which a developed industrial activity necessitates, and we saw that where the coercive regulating system proper to the one has not become too rigid, the non-coercive regulating system proper to the other begins to show itself as industry flourishes unchecked by war. The great liberalization of political arrangements which occurred among ourselves during the long peace that commenced in 1815, furnishes an illustration. An example of this metamorphosis is supplied by Norway, too, in which country absence of war and growth of free institutions have gone together. But our attention is demanded chiefly by the proofs that resumption of belligerent habits re-develops the militant type of structure.

Not dwelling on the instances to be found in ancient history, nor on the twice-repeated lapse of the rising Dutch Republic into a monarchy under the reactive influences of war, nor on the reversion from parliamentary government to despotic government which resulted from the wars of the Protectorate among ourselves, nor on the effect which a career of conquest had in changing the first French Republic into a military despotism, it will suffice if we contemplate the evidence yielded in recent years. How, since the establishment of a stronger centralized power in Germany by war, a more coercive *régime* has shown itself, we see in the dealings of Bismarck with the ecclesiastical powers, in the laying down by Moltke of the doctrine that both for safety from foreign attack and guardianship of order at home, it is needful that the supplies for the army should not be dependent on a parliamentary vote, and again in the measures lately taken for centralizing the State-control of German railways. In France we have as usual the chief soldier becoming the chief ruler, the maintenance, in many parts, of that state of siege which originated with the war; and the continuance by a nominally-free form of government of many restrictions upon freedom. But the kindred changes of late undergone by our own society, furnish the clearest illustrations; because the industrial type having developed here further than on the Continent, there is more scope for retrogression.

Actual wars and preparations for possible wars, have conspired to produce these changes. In the first place, since the accession of Louis Napoleon, which initiated the change, we have had the Crimean war, the war entailed by the Indian Mutiny, the China war, and the more recent but less serious wars in Africa. In the second place, and chiefly, there has been the re-development of military organization and feeling here, caused by re-development of them abroad. That in nations as in individuals a threatening attitude begets an attitude of defence, is a truth that needs no proof.

Hence among ourselves the recent growth of expenditure for army and navy, the making of fortifications, the formation of the volunteer force, the establishment of permanent camps, the repetition of autumn manœuvres, the building of military stations throughout the kingdom.

Of the traits accompanying this reversion towards the militant type, we have first to note the revival of predatory activities. Always a structure assumed for defensive action, available also for offensive action, tends to initiate it. As in Athens the military and naval organization developed in coping with a foreign enemy, thereafter began to exercise itself aggressively; as in France the triumphant army of the Republic formed to resist invasion, forthwith became an invader; so is it habitually—so is it now with ourselves. In China, India, Polynesia, Africa, the East Indian Archipelago, reasons—never wanting to the aggressor—are given for widening our empire without force if it may be, and with force if needful. After annexing the Fiji Islands, voluntarily ceded only because there was no practicable alternative, there comes now the proposal to take possession of Samoa. Accepting in exchange a territory subject to a treaty, we ignore the treaty and make the assertion of it a ground for war with the Ashantees. In Sherbro our agreements with native chiefs having brought about universal disorder, we send a body of soldiers to suppress it, and presently will allege the necessity of extending our rule over a larger area. So again in Perak. A resident sent to advise becomes a resident who dictates; appoints as sultan the most plastic candidate in place of one preferred by the chiefs, arouses resistance which becomes a plea for using force; finds usurpation of the government needful; has his proclamation torn down by a native, who is thereupon stabbed by the resident's servant; the resident is himself killed as a consequence; then (nothing being said of the murder of the native), the murder of the resident leads to outcries for vengeance, and a military

expedition establishes British rule. Be it in the slaying of Karen tribes who resist surveyors of their territory, or be it in the demand made on the Chinese in pursuance of the doctrine that a British traveller, sacred wherever he may choose to intrude, shall have his death avenged on some one, we everywhere find pretexts for differences which lead to acquisitions. In the House of Commons and in the Press, the same spirit is shown. During the debate on the Suez-Canal purchase, our Prime Minister, referring to the possible annexation of Egypt, said that the English people, wishing the Empire to be maintained, "will not be alarmed even if it be increased," and was cheered for so saying. And recently, urging that it is time to blot out Dahomey, the weekly organ of filibustering Christianity exclaims—"Let us take Whydah, and leave the savage to recover it."

And now, having observed this re-development of armed forces and revival of the predatory spirit, we may note that which chiefly concerns us—the return towards the militant type in our institutions generally—the extension of centralized administration and of compulsory regulation. In the first place we see it within the governmental organization itself: the functions of courts-martial on naval disasters are usurped by the head of the naval department; the powers of the Indian Government are peremptorily restricted by a minister at home; and county governing bodies, seeking to put part of their county burdens on the nation at large, are simultaneously yielding up part of their powers. Military officialism everywhere tends to usurp the place of civil officialism. we have military heads of the metropolitan and provincial police; military men hold offices under the Board of Works and in the Art department, the inspectors of railways are military men, and some municipal bodies in the provinces are appointing majors and captains to minor civil offices in their gift: an inevitable result being a style of administration which asserts authority more and regards individual claims

less. The spirit of such a system we see in the design and execution of the Contagious Diseases Acts—Acts which emanated from the military and naval departments, which over-ride those guarantees of individual freedom provided by constitutional forms, and which are administered by a central police not responsible to local authorities. Akin in spirit is the general sanitary dictation which, extending for these many years, has now ended in the formation of several hundred districts officered by medical men, partly paid by the central government and under its supervision. Within the organization of the medical profession itself we see a congruous change— independent bodies who give diplomas are no longer to be tolerated, but there must be unification—a single standard of examination. Poor-Law administration, again, has been growing more centralized—boards of guardians having had their freedom of action gradually restricted by orders from the Local Government Board. Moreover, while the regulating centres in London have been absorbing the functions of provincial regulating centres, these have in their turn been usurping those of local trading companies. In sundry towns municipal bodies have become distributors of gas and water, and now it is urged (significantly enough by a military enthusiast) that the same should be done in London. Nay, these public agencies have become builders too. The supplying of small houses having, by law-enforced cost of construction, been made unremunerative to private persons, is now in provincial towns to be undertaken by the municipalities; and in London the Metropolitan Board having proposed that the rate-payers should spend so much to build houses for the poor in the Holborn district, the Secretary of State says they must spend more! Of like meaning is the fact that our system of telegraphs, developed as a part of the industrial organization, has become a part of the governmental organization. And then, similarly showing the tendency towards increase of govern-

mental structures at the expense of industrial structures, there has been an active advocacy of State purchase of railways—an advocacy which has been for the present suspended only because of the national loss entailed by purchase of the telegraphs. How pervading is the influence we see in the schemes of a coercive philanthropy, which, invoking State-power to improve people's conduct, disregards the proofs that the restrictions on conduct enacted of old, and in later times abolished as tyrannical, habitually had kindred motives. Men are to be made temperate by impediments to drinking—shall be less free than hitherto to buy and sell certain articles. Instead of extending the principle proper to the industrial type of providing quick and costless remedies for injuries, minor as well as major, which citizens inflict on one another, legislators extend the principle of preventing them by inspection. The arrangements in mines, factories, ships, lodging-houses, bakehouses, down even to water-closets in private dwellings, are prescribed by laws carried out by officials. Not by quick and certain penalty for breach of contract is adulteration to be remedied, but by public analyzers. Benefits are not to be bought by men with the money their efficient work brings them, which is the law of voluntary co-operation, but benefits are given irrespective of effort expended without regard to their deserts, men shall have provided at the public cost, free libraries, free local museums, etc., and from the savings of the more worthy shall be taken by the tax-gatherer means of supplying the less worthy who have not saved. Along with the tacit assumption that State-authority over citizens has no assignable limits, which is an assumption proper to the militant type, there goes an unhesitating faith in State-judgment, also proper to the militant type. Bodily welfare and mental welfare are consigned to it without the least doubt of its capacity. Having by struggles through centuries deposed a power which, for their alleged eternal good, forced on men its teachings, we invoke another power

to force its teachings on men for their alleged temporal good. The compulsion once supposed to be justified in religious instruction by the infallible judgment of a Pope, is now supposed to be justified in secular instruction by the infallible judgment of a Parliament; and thus, under penalty of imprisonment for resistance, there is established an education bad in matter, bad in manner, bad in order

Inevitably along with this reversion to the compulsory social system which accompanies the return towards the militant type of structure, there goes an appropriate change of sentiments. In essence Toryism stands for the power of the State *versus* the freedom of the individual, and in essence Liberalism stands for the freedom of the individual *versus* the power of the State. But whereas, during the previous peaceful period, individual liberty was extended by abolishing religious disabilities, establishing free-trade, removing impediments from the press, etc., since the reversion began, the party which effected these changes has vied with the opposite party in multiplying State-administrations which diminish individual liberty. How far the principles of free government have been disregarded, and how directly this change is sequent upon the feeling which militant action fosters, is conclusively shown by the Suez-Canal business. A step which, to say nothing of the pecuniary cost, committed the nation to entanglements of a serious kind, was taken by its ministry in such manner that its representative body had a nominal but no real power of reversing it; and instead of protest against this over-riding of constitutional principles, there came general applause. The excuse accepted by all was the military exigency. The prompt action of the co-ordinating centre by which offensive and defensive operations are directed, was said to necessitate this ignoring of Parliament and implied suspension of self-government. And the general sentiment, responding to the alleged need for keeping our hold on a conquered territory, not only

CHAPTER XII.

QUALIFICATIONS AND SUMMARY.

§ 268. ONE who made the analogies between individual organization and social organization his special subject, might carry them further in several directions.

He might illustrate the general truth that as fast as structure nears completeness, modifiability diminishes and growth ends. The finished animal, moulded in all details, resists change by the sum of those forces which have evolved its parts into their respective shapes, and the finished society does the like. In either case results at length rigidity. Every organ of the one and institution of the other becomes, as maturity is approached, more coherent and definite, and offers a greater obstacle to alterations required either by increase of size or variation of conditions.

Then he might enlarge on the general fact that, as in individual organisms so in social organisms, after the structures proper to the type have fully evolved there presently begins a slow decay. He could not indeed furnish satisfactory proof of this; since among ancient societies, essentially militant in their activities, dissolution by conquest habitually prevented their cycles of changes from being completed; and since modern societies are passing through their cycles. But the minor parts of modern societies, especially during those earlier times when local development was little implicated with general de-

velopment, would yield him evidence. He might instance the fact that many ancient corporate towns with their guilds and regulations of industry gradually made more numerous and stringent, slowly decayed, and gave way before towns in which the absence of privileged classes permitted freedom of industry the rigid old structure having its function usurped by a plastic new one. In each institution, private or public, he might point to the ever-multiplying usages and bye-laws, severally introduced to adapt the actions to the requirements of the passing time, as eventually making adaptation to a coming time impracticable. And he might infer that a like fate awaits each entire society, which, as its adjustments to present circumstances are finished, loses power to re-adjust itself to the circumstances of the future eventually disappearing, if not by violence, then by a decline consequent on inability to compete with younger and more modifiable societies.

Were his speculative audacity sufficient he might end by alleging parallelisms between the processes of reproduction in the two cases. Among primitive societies which habitually multiply by fission, but are by conquest occasionally fused, group with group, after which there is presently a recurrence of fission, he might trace an analogy to what happens in the lowest types of organisms, which, multiplying fissiparously, from time to time reverse the process by that fusion which naturalists call conjugation. Then he might point out that in either case the larger types, where they have become stationary, propagate by the dispersion of germs. Adult organisms that are fixed send off groups of such units as they are themselves composed of, to settle down elsewhere and grow into organisms like themselves, as settled societies send off their groups of colonists. And he might even say that as union of the germinal group detached from one organism with a group detached from a kindred organism, is either essential to, or conducive to, the vigorous evolution of a new organism, so the mixture

of colonists derived from one society with others derived from a kindred society, is, if not essential to, still conducive to, the evolution of a new society more plastic than the old ones from which the mingled units were derived

But without committing ourselves to any such further adventurous suggestions, we may leave the comparison as it stands in preceding chapters

§ 269. This comparison has justified to a degree that could scarcely have been anticipated, the idea propounded by philosophers and implied even in popular language

Naturally—necessarily indeed—it has happened that this idea took at first crude forms. Let us glance at some of them

In the *Republic* of Plato, asserting the fact, not even yet adequately recognized, that “the States are as the men are, they grow out of human characters,” Socrates is represented as arguing—“then if the constitutions of States are five, the dispositions of individual minds will also be five”—an absurd corollary from a rational proposition. Division of labour is described as a social need, but it is represented rather as having to be established than as establishing itself. Throughout, the conception, like indeed to conceptions that prevail even still, is that society may be artificially arranged thus or thus. Alleging likeness between the citizen and the State of such nature that from the faculties of the one may be deduced those of the other, Plato, with the above-quoted belief that the States, growing “out of human characters,” are “as the men are,” joins the belief that these States, with characters thus determined, can yet determine the characters of their citizens. Chiefly, however, the erroneous nature of the analogy held by Plato to exist between the individual and the State, he shows by comparing the reason, passion, and desire, in the one, to the counsellors, auxiliaries, and traders in the other. Not to the mutually-dependent parts of the bodily organization are the mutually-dependent parts of the

political organization supposed to be analogous, but rather to the co-operating powers of the mind. The conception of Hobbes in one respect only approaches nearer to the rational conception. Like Plato he regards social organization not as natural but as factitious: propounding the notion of a social contract as originating governmental institutions, and as endowing the sovereign power with irrevocable authority. The analogy as conceived by him is best expressed in his own words. He says—"For by art is created that great LEVIATHAN called a COMMONWEALTH, or STATE, in Latin CIVITAS, which is but an artificial man; though of greater stature and strength than the natural, for whose protection and defence it was intended; and in which the *sovereignty* is an artificial *soul*, as giving life and motion to the whole body; the *magistrates*, and other *officers* of judicature, artificial *joints*, *reward* and *punishment*, by which fastened to the seat of the sovereignty every joint and member is moved to perform his duty, are the *nerves*, that do the same in the body natural;" etc. Here, in so far as the comparison drawn is in the main between the structures of the two, is it less indefensible than that of Plato, which is a comparison between structures in the one and functions in the other. But the special analogies named are erroneous; as is also, in common with that of Plato, the general analogy; since it is alleged between the organization of a society and the organization of a human being—an analogy far too special. Living at a later time, when biologists had revealed to a considerable extent the principles of organization in general, and recognizing social structures as not artificially created but gradually developed, M. Comte avoided these errors; and, not comparing the social organism to any particular kind of individual organism, held simply that the principles of organization were common to the two. He regarded each stage of social progress as a product of preceding stages; and he recognized the evolution of structures as proceeding

from the general to the special. He did not, however, entirely escape the early misconception that institutions are artificial arrangements; for he inconsistently held it possible for societies to be forthwith re-organized in conformity with the principles of his Positive Philosophy

Here let it once more be pointed out that there exist no analogies between the body politic and a living body, save those necessitated by that mutual dependence of parts which they display in common. Though, in foregoing chapters, comparisons of social structures and functions to structures and functions in the human body, have in many cases been made, they have been made only because structures and functions in the human body furnish the most familiar illustrations of structures and functions in general. The social organism, discrete instead of concrete, asymmetrical instead of symmetrical, sensitive in all its units instead of having a single sensitive centre, is not comparable to any particular type of individual organism, animal or vegetal. All kinds of creatures are alike in so far as each shows us co-operation among its components for the benefit of the whole; and this trait, common to them, is a trait common also to communities. Further, among the many types of individual organisms, the degree of this co-operation measures the degree of evolution; and this general truth, too, is exhibited among social organisms. Once more, to effect increasing co-operation, creatures of every order show us increasingly-complex appliances for transfer and mutual influence; and to this general characteristic, societies of every order furnish a corresponding characteristic. Community in the fundamental principles of organization is thus the only community asserted *

§ 270. But now let us drop this alleged parallelism be-

* This emphatic repudiation of the belief that there is any special analogy between the social organism and the human organism, I have a motive for making. A rude outline of the general conception elaborated in the preceding

tween individual organizations and social organizations. I have used the analogies elaborated, but as a scaffolding to help in building up a coherent body of sociological inductions. Let us take away the scaffolding the inductions will stand by themselves.

We saw that societies are aggregates which grow, that in various types of them there are great varieties in the degrees of growth reached; that types of successively larger sizes result from the aggregation and re-aggregation of those of smaller sizes, and that this increase by coalescence, joined with interstitial increase, is the process through which have been formed the vast civilized nations.

Along with increase of size in societies goes increase of structure. Primitive wandering hordes are without established unlikenesses of parts. With growth of them into tribes habitually come some differences; both in the powers and occupations of their members. Unions of tribes are followed by more differences, governmental and industrial—social grades running through the whole mass, and contrasts between the differently-occupied parts in different localities. Such differentiations multiply as the compounding progresses. They proceed from the general to the special. first the broad division between ruling and ruled; then within the ruling part divisions into political, religious, military, and within the ruled part divisions into food-producing classes and handi-craftsmen, then within each of these divisions minor ones, and so on.

Passing from the structural aspect to the functional aspect, we note that while all parts of a society have like natures and activities there is hardly any mutual dependence,

eleven chapters, was published by me in the *Westminster Review* for January, 1860. In it I expressly rejected the conception of Plato and Hobbes, that there is a likeness between social organization and the organization of the human body, saying that "there is no warrant whatever for assuming this." Nevertheless, criticisms upon the article ascribed to me the idea which I had thus distinctly condemned.

and the aggregate scarcely forms a vital whole. As its parts assume different functions they become dependent on one another, so that injury to one hurts others; until in highly-evolved societies, general perturbation is caused by derangement of any portion. This contrast between undeveloped and developed societies, is due to the fact that, with increasing specialization of functions comes increasing inability in each part to perform the functions of other parts.

The organization of every society begins with a contrast between the division which carries on relations, habitually hostile, with environing societies, and the division which is devoted to procuring necessities of life, and during the earlier stages of development these two divisions constitute the whole. Eventually there arises an intermediate division serving to transfer products and influences from part to part. And in all subsequent stages, evolution of the two earlier systems of structures depends on evolution of this additional system.

While the society as a whole has the character of its sustaining system determined by the general character of its environment, inorganic and organic, the respective parts of this system differentiate in adaptation to the circumstances of the localities; and, after primary industries have been thus localized and specialized, secondary industries dependent upon them arise in conformity with the same principle. Further, as fast as societies become compounded and re-compounded and the distributing system develops, the parts devoted to each kind of industry, originally scattered, aggregate in the most favourable localities; and the localized industrial structures, unlike the governmental structures, grow regardless of the original lines of division.

Increase of size, resulting from the massing of groups necessitates means of communication; both for achieving combined offensive and defensive actions, and for exchange of products. Scarcely traceable tracks, paths, rude roads, finished roads, successively arise; and as fast as intercourse

is thus facilitated, there is a transition from direct barter to trading carried on by a separate class ; out of which evolves, in course of time, a complex mercantile agency of wholesale and retail distributors. The movement of commodities effected by this agency, beginning as a slow flux and reflux to certain places at long intervals, passes into rhythmic, regular, rapid currents; and materials for sustentation distributed hither and thither, from being few and crude become numerous and elaborated. Growing efficiency of transfer with greater variety of transferred products, increases the mutual dependence of parts at the same time that it enables each part to fulfil its function better.

Unlike the sustaining system, evolved by converse with the organic and inorganic environments, the regulating system is evolved by converse, offensive and defensive, with environing societies. In primitive headless groups temporary chieftainship results from temporary war; chronic hostilities generate permanent chieftainship; and gradually from the military control results the civil control. Habitual war, requiring prompt combination in the actions of parts, necessitates subordination. Societies in which there is little subordination disappear, and leave outstanding those in which subordination is great; and so there are established societies in which the habit fostered by war and surviving in peace, brings about permanent subjection to a government. The centralized regulating system thus evolved is in early stages the sole regulating system. But in large societies that become predominantly industrial, there is added a decentralized regulating system for the industrial structures; and this, at first greatly subordinated by the original system, acquires at length substantial independence. Finally there arises for the distributing structures also, an independent controlling agency.

Societies fall firstly into the classes of simple, compound, doubly-compound, trebly-compound; and from the lowest the transition to the highest is through these

stages. Otherwise, though less definitely, societies may be grouped as militant and industrial; of which the one type in its fully-developed form is organized on the principle of compulsory co-operation, while the other in its fully-developed form is organized on the principle of voluntary co-operation—the one characterized not only by a despotic central power, but also by an unlimited control of personal conduct; and the other characterized not only by a democratic or representative central power, but also by limitation of control over personal conduct.

Lastly we noted the corollary that change in the predominant social activities brings metamorphosis. If, where the militant type has not elaborated into so rigid a form as to prevent it, a considerable industrial system arises, there come mitigations of the coercive restraints characterizing the predatory type, and weakening of its structures. Conversely, where an industrial system largely developed has established freer social forms, resumption of offensive and defensive activities causes reversion towards the militant type.

§ 271. And now, summing up the results of this general survey, let us observe the extent to which we are prepared by it for further inquiries.

The many facts contemplated unite in proving that social evolution forms a part of evolution at large. Like evolving aggregates in general, societies show *integration*, both by simple increase of mass and by coalescence and re-coalescence of masses. The change from *homogeneity* to *heterogeneity* is multitudinously exemplified: up from the simple tribe, alike in all its parts, to the civilized nation, full of structural and functional unlikenesses beyond enumeration. With progressing integration and heterogeneity goes increasing *coherence*. The wandering group dispersing, dividing, held together by no bonds; the tribe with parts made more coherent by subordination to a dominant man; the

cluster of tribes united in a political plexus under a chief with sub-chiefs; and so on up to the civilized nation consolidated enough to hold together for a thousand years or more. Simultaneously comes increasing *definiteness*. Such organization as the primitive horde shows, is vague; advance brings settled arrangements that grow slowly more precise; customs pass into laws which, while gaining fixity, also become more specific in their applications to varieties of actions; and all institutions, at first confusedly intermingled, step by step separate, at the same time that each within itself marks off more distinctly its component structures. Thus in all respects is fulfilled the formula of evolution, as a progress towards greater size, coherence, multiformity, and definiteness.

Besides these general truths, a number of more special truths have been disclosed by our survey. Comparisons of societies in their ascending grades, have made manifest certain cardinal facts respecting their growths, structures, and functions; respecting the systems of structures, sustaining, distributing, regulating, of which they are composed; respecting the relations of these structures to the surrounding conditions and the dominant forms of social activities entailed; and respecting the metamorphoses of types caused by changes in the activities. The inductions arrived at, thus constituting in rude outline an Empirical Sociology, suffice to show that in social phenomena there is a general order of co-existence and sequence; and that therefore social phenomena form the subject-matter of a science reducible, in some measure at least, to the deductive form.

Guided, then, by the law of evolution in general, and, in subordination to it, guided by the foregoing inductions, we are now prepared for following out the synthesis of social phenomena. We must begin with those simplest ones presented by the evolution of the family.

PART III.

THE DOMESTIC RELATIONS.

CHAPTER I.

THE MAINTENANCE OF SPECIES.

§ 272. As full understanding of the social relations cannot be gained without studying their genesis, so neither can full understanding of the domestic relations; and fully to understand the genesis of the domestic relations, we must go further back than the history of man carries us.

Of every species it is undeniable that individuals which die must be replaced by new individuals, or the species as a whole must die. No less obvious is it that if the death-rate in a species is high, the rate of multiplication also must be high, and conversely. And as this due proportioning of reproduction to mortality is requisite for mankind as for every other kind, we may infer that the facts exhibited by living beings in general must be considered before the meanings of the facts exhibited by human beings can be completely comprehended.

§ 273. Regarding the continued life of the species as in every case the end to which all others are subordinate (for if the species disappears all other ends disappear), let us look at the several modes there are of achieving this end. The requirement that the full number of adults shall arise in successive generations, may be fulfilled in variously-modified ways, which subordinate the existing and next-succeeding members of the species in various degrees.

Low creatures having small powers of meeting the life-

destroying activities around, and still smaller powers of protecting progeny, can maintain their kinds only if the mature individual produces the germs of new individuals in immense numbers; so that, unprotected and defenceless as the germs are, one or two may escape destruction. Manifestly, the larger the part of the parental substance transformed into germs (and often the great mass of it so transformed), the smaller is the part that can be devoted to individual life.

With each germ, usually contained in an ovum, is laid up some nutritive matter, available for growth before it commences its own struggle for existence. From a given quantity of matter devoted by the parent-organism to reproduction, there may be formed either a larger number of germs with a smaller quantity of nutritive matter each, or a smaller number with a larger quantity each. Hence result differences in the rates of juvenile mortality. Here of a million minute ova left uncared for, the majority are destroyed before they are hatched, multitudes of the remainder, with the feeblest powers of getting food and evading enemies, die or are devoured soon after they are hatched, so that very few have considerable amounts of individual life. Conversely, when the conditions to be met by the species make it advantageous that there should be fewer ova and more nutriment bequeathed to each, the young individuals, beginning life at more advanced stages of development, survive longer: the species is maintained without the sacrifice of so many before arrival at maturity.

All varieties in the proportions of these factors occur. An adult individual, the single survivor from hundreds of thousands of germs, may itself be almost wholly sacrificed individually in the production of germs; in which case the species is maintained at enormous cost, of both the mature and of the young. Or the adult, devoting but a moderate portion of its substance to the production of germs, may

enjoy a considerable amount of life ; in which case the cost of maintaining the species is shown in an immense mortality of the young. Or the mature creature, sacrificing its substance almost entirely, may produce a moderate number of ova severally well provided with nutriment and well protected, among which the mortality is not so great ; and in this case the cost of maintaining the species falls more on the parent and less on the young.

§ 274 Thus while, in one sense, the welfare of a species depends on the welfare of its individuals, in another sense, the welfare of the species is at variance with the welfare of its individuals ; and further, the sacrifice of individuals may tell in different proportions on the young and on the mature.

Already in the *Principles of Biology*, §§ 319—51, the antagonism between Individuation and Genesis under its general aspects has been set forth. Here certain of its special aspects concern us. To comprehend them clearly, which we shall find it important to do, we must look at them more closely.

CHAPTER II

THE DIVERSE INTERESTS OF THE SPECIES, OF THE PARENTS, AND OF THE OFFSPRING.

§ 275. AMONG the microscopic *Protozoa*, there is perpetual spontaneous fission. After a few hours of independent existence, each individual is sacrificed in producing two new individuals, which, severally growing, soon themselves repeat the process. And then from time to time there occurs a still more extreme form of reproductive dissolution: after a period of quiescence the entire body breaks up into germs whence arise a new generation. Here, then, a parental life extremely brief, disappears absolutely in the lives of progeny.

Animal aggregates of the second order show us sundry ways in which this actual transformation of the parental body into the bodies of offspring takes place, though now, of course, at much longer intervals. Among the *Cœlenterata*, there is the case of certain *medusæ*, where the polype-like body of the parent, or *quasi*-parent, after reaching a certain growth, changes into a series of segments, like a pile of saucers, each of which, developing in turn, swims away and becomes a medusa. In these and allied cases of cyclical generation, it may, however, be held that, as the medusa is the adult form, the body of an immature individual is sacrificed in producing these partially-developed mature individuals. A kindred result is achieved

in a different manner among some trematode *entozoa*. Evolved far enough to have head, appendages, and alimentary system, a *Cercaria* presently transforms the whole of its internal substance into young *Cercariae* substantially like itself, and, eventually bursting, sets them free, severally to pursue the same course. Finally, after two or three generations so produced, complete individuals are formed.

Different in method, but showing us in an equal degree the dissolution of a parent's body into portions that are to continue the race, is the mode of reproduction in the cestoid *entozoa*. A segment of a tape-worm, known as a proglottis in its adult and separated state, has then a life shown only by a feeble power of movement. It has descended from one out of myriads of eggs produced by a preceding tape-worm, and is itself, at the time of becoming an independent individual, nothing more than a receptacle for innumerable eggs. Without limbs, without senses, without even alimentary system, its vitality is scarcely higher than that of a plant; and it dies as soon as its contained masses of ova are matured. Here we have an extreme instance of subordination both of adult and young to the interests of the species.

Ascending now to higher types, let us take a few examples from the *Articulata*. Many kinds of parasitic crustaceans, such as the *Lerneæ*, pass through a brief early stage during which the young individual swims about. Nearly always it then dies, but if it succeeds in fixing itself on a fish, it loses its limbs and senses, and, doing nothing but absorb nutriment from the fish, evolves enormous ovisacs. Budding out from the sides of its body, these by and by greatly exceed its body in bulk: the parental life is lost in producing multitudinous eggs.

An instance analogous in result, though somewhat different in method, occurs even among insects. Having no higher life than is implied by sucking in the juices of the cactus over which it creeps, the female cochineal insect develops, as it approaches maturity, masses of ova which eventually fill its interior; and gradually,

as its substance is absorbed into the ova, it dies and leaves the shell of its body as a protective envelope for them whence issuing, ninety-nine are devoured for one that survives.

Among superior insects, along with perhaps an equal sacrifice of young, the sacrifice of adults is less. After a larval stage during which the vital activities are relatively low and the mortality high, there comes, for the one survivor out of hundreds, an active maturity. This, however, is brief—sometimes lasting but for a few days, and after the deposition of eggs, life forthwith ceases.

The *Vertebrata* will furnish such further illustrations as are needed. In this class the sacrifice of parental life to the maintenance of the species, is in few if any cases direct. A cod produces above a million eggs, and, surviving, does this year after year, but while the life of the parent is preserved, nine hundred and ninety-nine thousand and more of the progeny have their lives cut short at various stages on the way to maturity. In higher types of the class, producing comparatively few eggs that are better provided for, this sacrifice of the rising generation to the interests of the species is much less, and for the like reason it is much less also in the next highest group of vertebrates, the *Amphibia*.

Passing to Birds, we find preservation of the race secured at a greatly-diminished cost to both parents and offspring. The young are so well fostered that out of a small number most grow up, and here perhaps a half, and there perhaps a fourth, reach the reproductive stage. Further, the lives of parents are but partially subordinated at times when the young are being reared. And then there are long intervals between breeding-seasons, during which the lives of parents are carried on for their own sakes.

In the highest class of vertebrates, the *Mammalia*, regarded as a whole, we see a like general advance in this conciliation of the interests of the species, the parents, and the young, and we also see it within the class itself, on ascending from its lower to its higher types. A small rodent

reaches maturity in a few months, and, producing large and frequent broods, soon dies. there is but a short early period during which the female lives for herself, and she mostly loses life before the reproductive age is past, so having no latter days unburdened by offspring. Turning at once to the other extreme we find an immense contrast. Between twenty and thirty years of the young elephant's life passes entirely in individual development and activity. The tax of bearing offspring, relatively few and at long intervals, subordinates in but a moderate degree the life of the adult female. And though our knowledge does not enable us to say how long life lasts after the reproductive age is past, yet, considering that the powers remain adequate for sustentation and self-defence, we may infer that the female elephant usually enjoys a closing series of many years; while the male is throughout life scarcely at all taxed.

§ 276. In yet another way does evolution decrease the sacrifice of individual life to the life of the species. The material cost of reproduction involves an equivalent subtraction from individual development and activity, for which among low types there is no compensation; but as we ascend through higher types we find an increasing compensation in the shape of parental pleasures.

Limiting our illustrations to vertebrate animals, we see that by most fishes and amphibians, the spawn, once deposited, is left to its fate. there is great physical expense, and if no subsequent efforts are entailed, there are also none of the accompanying gratifications. It is otherwise with birds and mammals. While the rearing of offspring entails labour on one or both parents, the parental life, though thereby in one way restricted, is in another way extended; since it has become so moulded to the requirements, that the activities of parenthood are sources of agreeable emotions, just as are the activities which achieve self-sustentation.

When from the less intelligent of these higher vertebrates

which produce many young at short intervals, and have to abandon them at early ages, we ascend to the more intelligent which produce few young at longer intervals, and give them aid for longer periods, we perceive that, while the rate of juvenile mortality is thus diminished, there results both a lessened physical cost of maintaining the species, and an augmented satisfaction of the affections

§ 277. Here, then, we have definite measures by which to determine what constitutes advance in the relations of parents to offspring and to one another. In proportion as organisms become higher in their structures and powers, they are individually less sacrificed to the maintenance of the species; and the implication is that in the highest type of man this sacrifice is reduced to a minimum.

Commonly, when discussing the domestic relations, the welfare of those immediately concerned is almost exclusively regarded. The goodness or badness of given connexions between men and women, is spoken of as though the effects on the existing adult generation were chiefly to be considered, and, if the effects on the rising generation are taken into account, little if any thought is given to the effects which future generations will experience. This order has, as we see, to be reversed

Family organizations of this or that kind have first to be judged by the degrees in which they help to preserve the social aggregates they occur in, for, in relation to its component individuals, each social aggregate stands for the species. Mankind survives not through arrangements which have reference to it as a whole, but by survival of its separate societies; each of which struggles to maintain its existence in presence of other societies. And the survival of the race, achieved through the survival of its constituent societies, being the primary requirement, the domestic arrangements most conducive to survival in each society, must be regarded as relatively appropriate.

In so far as it consists with preservation of the society, the next highest end is raising the largest number of healthy offspring from birth to maturity. The qualification does not seem needed, but we shall find evidence that it is needed. Societies, and especially primitive groups, do not always thrive by unchecked increase in their numbers, but, contrariwise, in some cases preserve themselves from extinction at the cost of increased mortality of the young.

After welfare of the social group and welfare of progeny, comes welfare of parents. That form of marital relation must in each case be held the best which, subject to these preceding requirements, furthers most, and burdens least, the lives of adult men and women.

And as a last end to be contemplated comes that furtherance of individual life which we see when the declining years of parents, elongated and made pleasurable by offspring, also become sources of pleasure to those offspring.

Uniting these propositions, we draw the corollary that the highest constitution of the family is reached when there is such conciliation between the needs of the society and those of its members, old and young, that the mortality between birth and the reproductive age falls to a minimum, while the lives of adults have their subordination to the rearing of children reduced to the smallest degree. The diminution of this subordination takes place in three ways: first, by elongation of that period which precedes reproduction; second, by decrease in the number of offspring borne and reared, as well as by increase of the pleasures taken in the care of them, and third, by lengthening of the life that follows cessation of reproduction.

This ideal of the family suggested by a survey of the sexual and parental relations throughout the organic world, is also the ideal to which comparisons between the lower and the higher stages of human progress point. In savage tribes we habitually find great juvenile mortality; there is commonly more or less infanticide; or there are many

early deaths from unfavourable conditions; or there are both. Again, these inferior races are characterized by early maturity and commencing reproduction; implying shortness of that first period during which the individual life is carried on for its own sake. While fertility lasts, the tax, especially on the women, who are also exhausted by drudgeries, is great. The marital and parental relations are sources of pleasures neither so high nor so prolonged as in the civilized races. And then after children have been reared, the remaining life of either sex is brief, often being ended by violence, often by deliberate desertion; and otherwise by rapid decay unchecked by filial care.

We are thus furnished with both a relative standard and an absolute standard by which to measure the domestic relations in each stage of social progress. While, judging them relatively by their adaptations to the accompanying social requirements, we may be led to regard as needful in their times and places, arrangements that are repugnant to us, we shall, judging them absolutely, in relation to the most developed types of life, individual and national, find good reasons for reprobating them. For this preliminary survey clearly reveals the fact that the domestic relations which are the highest as ethically considered, are also the highest as considered both biologically and sociologically.*

* This seems the fittest place for naming an important suggestion made by an American adherent of mine, late Lecturer on Philosophy at Harvard University, Mr John Fiske, respecting the transition from the gregariousness of anthropoid creatures to the sociality of human beings, caused by the relations of parents to offspring. (See *Outlines of Cosmic Philosophy*, vol II, pp 342-4.) Postulating the general law that in proportion as organisms are complex they evolve slowly, he infers that the prolongation of infancy which accompanied development of the less intelligent primates into the more intelligent ones, implied greater duration of parental care. Children, not so soon capable of providing for themselves, had to be longer nurtured by female parents, to some extent aided by male parents, individually or jointly, and hence resulted a bond holding together parents and offspring for longer periods, and tending to initiate the family. That this has been a co-operating factor in social evolution, is highly probable.

CHAPTER III.

PRIMITIVE RELATIONS OF THE SEXES.

§ 278. Most readers will have thought it strange to begin an account of the domestic relations by surveying the most general phenomena of race-maintenance. But they may see the propriety of setting out with a purely natural-history view, on being shown that among the lowest savages the relations of the sexes differ in no marked ways from those common among inferior creatures.

The males of gregarious mammals usually fight for possession of the females, and primitive men do not in this respect differ from other gregarious mammals. Hearne tells us of the Chippewayans that "it has ever been the custom among these people for the men to wrestle for any woman to whom they were attached." According to Hooper, as quoted by Bancroft, a Tuski, desiring another one's wife, fights with her husband. Of the Bushmen, Lichtenstein writes—"the stronger man will sometimes take away the wife of the weaker" So again, Narcisse Peltier, who from twelve years of age up to twenty-nine was detained by a tribe of Queensland Australians, states that the men "not unfrequently fight with spears for the possession of a woman." And summing up the accounts of the Dogrib Indians, Sir John Lubbock says—"In fact, the men fight for the possession of the women, just like stags"

Nor is it on the part of males only, that this practice

exists Peltier tells us that in the above-named tribe, the women, of whom from two to five commonly belong to each man, fight among themselves about him "their weapons being heavy staves with which they beat one another about the head till the blood flows" And the trait of feminine nature thus displayed, is congruous with one indicated by Mitchell, who says that "after battle, it frequently happens among the native tribes of Australia, that the wives of the conquered, of their own free will, go over to the victors". reminding us of the lioness which, quietly watching the fight between two lions, goes off with the conqueror

We have thus to begin with a state in which the family, as we understand it, can scarcely be said to exist. In the loose groups of men first formed, there is no established order of any kind. everything is indefinite, unsettled As the relations of men to one another are undetermined, so are the relations of men to women In either case there are no guides save the passions of the moment, checked only by fears of consequences Let us glance at the facts which show the relations of the sexes to have been originally unregulated by the institutions and ideas we commonly regard as natural.

§ 279 According to Sparman, there is no form of union between Bushmen and Bushwomen save "the agreement of the parties and consummation." Keating tells us that the Chippewas have no marriage ceremony Hall says the same thing of the Esquimaux, Bancroft of the Aleuts, Brett of the Arawaks, Tennent of the Veddahs, and the Lower Californians, Bancroft says, "have no marriage ceremony, nor any word in their language to express marriage. Like birds or beasts, they pair off according to fancy."

Even where a ceremony is found, it is often nothing more than either a forcible or a voluntary commencement of living together. Very generally there is a violent seizure of the woman by the man—a capture; and the marriage is

concluded by the completion of this capture. In some cases the man and woman light a fire and sit by it; in some cases, as among the Todas, the union is established when the bride performs "some trifling household function;" in some cases, as among the New Guinea people, "the female gives her intended some tobacco and betel-leaf" Davis says that when the Navajos desire to marry, "they sit down on opposite sides of a basket, made to hold water, filled with atole or some other food, and partake of it. This simple proceeding makes them husband and wife" Nay, we have the like in the old Roman form of *confarreatio*—marriage constituted by jointly eating cake. These indications that the earliest marriage-ceremony was merely a formal commencement of living together, imply a preceding time when the living together began informally

Moreover, such domestic union as results is so loose, and often so transitory, as scarcely to constitute an advance. In the Chippewayan tribes "divorce consists of neither more nor less than a good drubbing, and turning the woman out of doors." The Pericú (Lower Californian) "takes as many women as he pleases, makes them work for him as slaves, and when tired of any one of them turns her away" Similarly, according to Southey, when one of the Tupis "was tired of a wife, he gave her away, and he took as many as he pleased." Bonwick tells us that for Tasmanians not to change their wives, was "novel to their habits, and at variance with their traditions" Of the Kasias, Yule alleges that "divorce is so frequent that their unions can hardly be honoured with the name of marriage" Even peoples so advanced as the Malayo-Polynesians furnish kindred facts. In Thompson's *New Zealand* we read that "men were considered to have divorced their wives when they turned them out of doors." And Ellis, confirming Cook, says that in Tahiti "the marriage tie was dissolved whenever either of the parties desired it." It may be added that this careless breaking of marital bonds is

not peculiar to men. Where women have the power, as among the above-named Kasias, they cavalierly turn their husbands out of doors if they displease them; and Herrera tells us that the like happened with some of the Ancient Mexicans

These facts, which might be supported by many others, show us clearly enough that the marital relations, like the political relations, have gradually evolved, and that there did not at first exist those ideas and feelings which among civilized nations give to marriage its sanctity

§ 280 Absence of these ideas and feelings is further shown by the prevalence in rude societies of practices which are to us in the highest degree repugnant.

Various of the uncivilized and semi-civilized display hospitality by furnishing guests with temporary wives. Herrera tells us of the Cumana people, that "the great men kept as many women as they pleased, and gave the beautifullest of them to any stranger they entertained." Savages habitually thus give their wives and daughters. Among such Sir John Lubbock enumerates the Esquimaux, North and South American Indians, Polynesians, Eastern and Western Negroes, Arabs, Abyssinians, Kaffirs, Mongols, Tutsi, etc. Of the Bushman wife Sparman tells us that when the husband gives her permission, she may go whither she will, and associate with any other man. Of the Greenland Esquimaux, Egede, as quoted by Sir John Lubbock, expressly states that "those are reputed the best and noblest tempered who, without any pain or reluctance, will lend their friends their wives"

Akin is the feeling shown by placing little or no value on chastity in the young. In Benguela (Congo), according to Bastian, poor maidens were led about before marriage, in order to acquire money by prostitution. From Herrera we learn that the Mexicans had an identical custom. "parents used when the maidens were marriageable, to send them to

earn their portions, and accordingly they ranged about the country in a shameful manner till they had got enough to marry them off." Bancroft says the ancient people of the Isthmus of Darien thought "prostitution was not infamous; noble ladies held as a maxim, that it was plebeian to deny anything asked of them"—an idea like that of the Andamanese, among whom good manners are thought to require concessions of this kind.

Equally strange are the marital sentiments displayed by certain peoples, both extant and extinct. Of the Assanyeh Arabs, whose marriages are for so many days in the week, usually four, Petherick tells us that during a preliminary negotiation the bride's mother protests against "binding her daughter to a due observance of that chastity which matrimony is expected to command, for more than two days in the week," and there exists on the part of the men a duly adapted sentiment—the husband, allowing the wife to disregard all marital obligations during the off days, even considers an intrigue with some other man as a compliment to his own taste. Some of the Chibchas of ancient Central America betrayed a kindred feeling. Not simply were they indifferent to virginity in their brides, but if their brides were virgins "thought them unfortunate and without luck, as they had not inspired affection in men. accordingly they disliked them as miserable women."

While lacking the ideas and feelings which regulate the relations of the sexes among advanced peoples, savages often exhibit ideas and feelings no less strong, but of quite contrary characters. The Shushwaps of Columbia hold that "to give away a wife without a price is in the highest degree disgraceful to her family," and, similarly, by the Modocs of California "the children of a wife who has cost her husband nothing are considered no better than bastards, and are treated by society with contumely." Again, in Burton's *Abeokuta*, we read that "those familiar with modes of thought in the East well know the horror and loathing with which the people generally look upon the

one-wife system"—a statement we might hesitate to receive were it not verified by that of Livingstone concerning the negro women on the Zambesi, who were shocked on hearing that in England a man had only one wife, and by that of Bailey, who describes the disgust of a Kandian chief when commenting on the monogamy of the Veddahs.

§ 281. Still more are we shown that regular relations of the sexes are results of evolution, and that the sentiments upholding them have been gradually established, on finding how little regard is paid by many uncivilized and semi-civilized peoples to those limitations which blood-relationships dictate among the civilized.

Among savages, connexions which we condemn as in the highest degree criminal, are by no means infrequent. Hearne says of the Chippewayans that many of them "cohabit occasionally with their own mothers, and frequently espouse their sisters and daughters," and Bancroft quotes Langsdorff as saying the like of the Kadiaks. So, too, respecting the Karens of Tenasserim, Heler tells us that "matrimonial alliances between brother and sister, or father and daughter, are not uncommon to this day." To these cases from America and Asia may be added a case from Africa. According to Bastian, to keep the royal blood pure, the kings of Cape Gonzalves and Gaboon are accustomed to marry their grown up daughters, and the queens marry the eldest sons.

Incest of the kind that is a degree less shocking is exemplified by more numerous peoples. According to Clavigero, marriage between brother and sister was not prohibited by the Panuchese. Concerning the people of Cali, Piedrahita says that "they married their nieces, and some of the lords their sisters." Torquemada states that "in the district of New Spain four or five cases * * * of marriage with sisters were found." In Peru, the "Yncas from the first established it as a very stringent law and custom that the heir to the kingdom should marry his eldest sister, legitimate both

on the side of the father and the mother." So, too, in Polynesia, Ellis tells us of the Sandwich Islanders, that near consanguineous marriages are frequent in the royal family—brothers and sisters sometimes marrying. Describing the customs of the Malagasy, Drury says "the nearest of kin marry, even brother and sister, if they have not the same mother." Nor do we lack instances among ancient peoples of the old world. "That the restriction [prohibiting marriage with a uterine sister] was not observed in Egypt, we have sufficient evidence from the marriages of several of the Ptolemies," says Wilkinson. Even our own Scandinavian ancestors allowed incest of this kind. It is stated in the *Heimskringla Saga* that Niord took his own sister in marriage, "for that was allowed by" the Vanaland law.

It may be said that certain of these unions are with half-sisters (like the union of Abraham and Sarah); that such occurred among the Canaanites, Arabians, Egyptians, Assyrians, Persians, and that they go along with non-recognition of kinship in the male line. But admitting this to be true in some of the cases, though clearly not in others, we are still shown how little warrant exists for ascribing to primitive instinct the negations of unions between those nearly related, for the very words forbidding marriage to a half-sister having the same mother, though not to one having the same father, clearly imply that the male parenthood is habitually known though disregarded.

As further proving that sentiments such as those which among ourselves restrain the sexual instincts, are not innate, I may add the strange fact which Bailey tells us concerning the Veddahs. Their custom "sanctions the marriage of a man with his younger sister. To marry an elder sister or aunt would, in their estimation, be incestuous, a connection in every respect as revolting to them as it would be to us—as much out of the question and inadmissible as the marriage with the younger sister was proper and natural. It was, in fact, *the* proper marriage."

§ 282. While the facts show us a general association between the rudest forms of social existence and the most degraded relations of the sexes, they do not show us that social progress and progress towards a higher type of family life are uniformly connected. Various anomalies meet us.

Unenduring unions characterize many of the lowest races; and yet the miserable Veddahs, lower than most in their social state, form unusually enduring unions. Bailey writes—"Divorce is unknown among them * * * I have heard a Veddah say, 'Death alone separates husband and wife'". a trait in which their Kandian neighbours, otherwise considerably superior, differ from them widely

Nor do we find that the diminution of incestuous connexions, preserves a constant ratio to social evolution. Those extreme forms of them which we have noted among some of the most degraded races of North America, are paralleled among royal families in African kingdoms of considerable size; while forms of them a degree less repulsive are common to savage and semi-civilized

Though that type of family life in which there is one wife to several husbands is said to occur among some of the lowest tribes, as the Fuegians, yet it is by no means common among the lowest, while we meet with it among relatively-advanced peoples, in Ceylon, in Malabar, and in Thibet. And the converse arrangement, of many wives to one husband, almost universally allowed and practised by savages, not only survives in semi-civilized societies but has held its ground in societies of considerably-developed types, past and present.

Neither are there connexions so clear as might have been expected, between sexual laxity and general debasement, moral or social, and conversely. The relations between the men and women in the Aleutian Islands are among the most degraded. Nevertheless those islanders are described by Cook as "the most peaceful, inoffensive people I ever met with. And, as to honesty, they might serve

as a pattern to the most civilized nation upon earth." On the other hand, while the Thlinkeet men are said to "treat their wives and children with much affection," and the women to show "reserve, modesty, and conjugal fidelity," they are described as thievish, lying, and extremely cruel, maiming their prisoners out of pure wantonness and killing their slaves, and, similarly, though the Bachassins (Bechuanas) are reprobated as lamentably debased, having "a universal disregard to truth and indifference to murder," yet the women are modest and "almost universally faithful wives" A kindred anomaly meets us on contrasting societies in higher stages. We have but to read Cook's account of the Tahitians, who were not only considerably advanced in arts and social arrangements, but displayed the kindlier feelings in unusual degrees, to be astonished at their extreme disregard of restraints on the sexual instincts. Conversely, those treacherous, bloodthirsty cannibals the Fijians, who commit atrocities which Williams said he dared not record, display considerable superiority in their sexual relations: Eiskine states that "female virtue may be rated at a high standard for a barbarous people"

Moreover, contrary to what we should expect, we find great sexual laxity in some directions joined with rigidity in others Among the Koniagas "a young unmarried woman may live uncensured in the freest intercourse with the men; though, as soon as she belongs to one man, it is her duty to be true to him." Herrera tells us of the Cumana people—"The maidens * * * made little account of their virginity The married women * * * lived chaste." And similarly P Pizarro says of the Peruvians that "the wives of the common people were faithful to their husbands * * * Before their marriage, their fathers did not care about their being either good or bad, nor was it a disgrace with them [to have loose habits]" Even of those Chibchah husbands above referred to as so strangely indifferent, or

less than indifferent, to feminine chastity before marriage, it is said that "nevertheless, they were very sensitive to infidelity."

The evidence, then, does not allow us to infer, as we should naturally have done, that advance in the forms of the sexual relations and advance in social evolution, are constantly and uniformly connected.

§ 283. Nevertheless, on contemplating the facts in their *ensemble*, we see that progress towards higher social types is joined with progress towards higher types of the sexual relations. Comparison of the extremes makes this unquestionable. The lowest groups of primitive men, without political organization, are also without anything worthy to be called domestic organization. the relations of the sexes and those of parents to offspring are scarcely above those of brutes. Contrariwise, all civilized nations, characterized by definite, coherent, orderly social arrangements, are also characterized by definite, coherent, orderly family arrangements. Hence we cannot doubt that, spite of irregularities, the developments of the two are associated in a general way.

Leaving here this preliminary survey and its implications, we have now to trace, so far as we can, the successively higher forms of family structure. We may expect to find the genesis of each depending on the circumstances of the society conduciveness to social self-preservation under the conditions of the case, being the determining cause. Setting out with wholly-unregulated relations of the sexes, the first customs established must have been those which most favoured social survival; not because this was seen, but because the societies that had customs less fit, disappeared.

But before considering the separate forms of the sexual relations, we must consider a previous question—Whence come the united persons?—Are they of the same tribe or of different tribes? or are they partly one and partly the other?

CHAPTER IV.

EXOGENY AND ENDOGENY

§ 284. IN his ingenious and interesting work on *Primitive Marriage*,* the words "Exogamy" and "Endogamy" are used by Mr. McLennan to distinguish the two practices of taking to wife women belonging to other tribes, and taking to wife women belonging to the same tribe. As explained in his preface, his attention was drawn to these diverse customs by an inquiry into "the meaning and origin of the form of capture in marriage ceremonies,"—an inquiry which led him to a general theory of early sexual relations. The following outline of his theory I disentangle, as well as I can, from statements that are not altogether consistent.

Scarcity of food led groups of primitive men to destroy female infants; because, "as braves and hunters were required and valued, it would be the interest of every horde to rear, when possible, its healthy male children. It would be less its interest to rear females, as they would be less capable of self-support, and of contributing, by their exertions, to the common good" (p. 165)

Mr McLennan next alleges that "the practice in early times of female infanticide," "rendering women scarce, led at once to polyandry within the tribe, and the capturing of women from without." (p 138.)

Joined with a re-statement of the causes we come upon

* *Primitive Marriage* By John F. McLennan, M A, Edinburgh, 1865.

an inferred result, as follows —“ The scarcity of women within the group led to a practice of stealing the women of other groups, and in time it came to be considered improper, because it was unusual, for a man to marry a woman of his own group ” (p 289.) Or, as he says on p 140, “ usage, induced by necessity, would in time establish a prejudice among the tribes observing it (exogamy)—a prejudice, strong as a principle of religion, as every prejudice relating to marriage is apt to be—against marrying women of their own stock ”

To this habitual stealing of wives, and re-stealing of them, as among the Australians (p 76,) he ascribes that doubtful paternity which led to the recognition of kinship through females only. Though elsewhere admitting a more general cause for this primitive form of kinship (p 159,) he regards wife-stealing as its most certain cause saying that “ it must have prevailed wherever exogamy prevailed—exogamy and the consequent practice of capturing wives. Certainty as to fathers is impossible where mothers are stolen from their first lords, and liable to be re-stolen before the birth of children ” (p 226)

Assuming the tribes which thus grew into the practice of wife-stealing, to have been originally homogeneous in blood, or at least to have supposed themselves, so Mr McLennan argues that the introduction of wives who were foreigners in blood, joined with the rise of the first definite conception of relationship (that between mother and child) and consequent system of kinship exclusively in the female line, led to recognized heterogeneity within the tribe there came to exist within the tribe, children regarded as belonging by blood to the tribes of their mothers. Hence arose another form of exogamy. The primitive requirement that a wife should be stolen from another tribe, naturally became confounded with the requirement that a wife should be of the blood of another tribe, and hence girls born within the tribe, from mothers belonging to other tribes, became

eligible as wives. The original exogamy, carried out only by robbing other tribes of their women, gave place, in part, or wholly, to the modified exogamy carried out by marrying from within the tribe, women bearing family names which implied that they were foreign in blood.

In tracing the development of higher forms of the domestic relations, Mr. M'Lennan postulates, as we have seen, that the scarcity of women "led at once to polyandry within the tribe, and the capturing of women from without." Describing and illustrating the different forms of polyandry, ending in that highest form in which the husbands are brothers, he points out that at this stage there arose recognition not only of descent in the female line, but also of descent in the male line, since the father's blood was known, though not the father.

Then through gradually-established priority of the elder brother, as being the first of the group to marry and the first likely to have children, it became an accepted fiction that all the children were his. "the elder brother was a sort of paterfamilias," and "the idea of fatherhood" thus caused, was a step towards kinship through males, and "a step away from kinship through females" (pp. 243-4)

Pointing out that among some polyandrous peoples, as the Kandians, the chiefs have become monogamists, Mr. M'Lennan argues (p 245) that their example would be followed, and "thus would arise a practice of monogamy or of polygamy." And he thence traces the genesis of the patriarchal form, the system of agnation, the institution of caste

Though this outline of Mr M'Lennan's theory is expressed, wherever regard for brevity permits, in his own words, yet possibly he may take exception to it; for, as already hinted, there are incongruities in his statements, and the order in which they are placed is involved. That many of the phenomena he describes exist, is beyond question. It is undeniable that the stealing of women, still habitual with sundry low races, was practised in the past by races

now higher; and that the form of capture in marriage-ceremonies prevails in societies where no real capture occurs at present. It is undeniable that kinship through females is, among various primitive peoples, the only kinship avowedly recognized, and that it leads to the descent of name, rank, and property in the female line. It is undeniable that in many places where wife-stealing is, or has been, the practice, marriage is forbidden between those of the same family name, who are assumed to be of the same stock. But while admitting much of the evidence, and while accepting some of the inferences, we shall find reason for doubting Mr M'Lennan's theory taken as a whole. Let us consider, first, the minor objections.

§ 285. Sundry facts inconsistent with his conclusion, though referred to by Mr M'Lennan, he passes over as of no weight. He thinks there is warrant for the belief that exogamy and wife-capture have "been practised at a certain stage among every race of mankind" (p. 138). This stage being the one now exemplified by sundry low races. Nevertheless, he admits that "the separate endogamous tribes are nearly as numerous, and they are in some respects as rude, as the separate exogamous tribes" (p. 145). Now if, as he believes, exogamy and wife-stealing have "been practised at a certain stage among every race of mankind"—that stage being the primitive one, and if, as he seeks to prove, endogamy is a form reached through a long series of social developments; it is difficult to understand how the endogamous tribes can be as rude as the exogamous ones.

Again, he names the fact that "in some districts—as in the hills on the north-eastern frontier of India, in the Caucasus, and the hill ranges of Syria—we find a variety of tribes, proved, by physical characteristics and the affinities of language, of one and the same original stock, yet in this particular differing *toto cælo* from one another—some forbidding marriage within the tribe, and

some proscribing marriage without it" (pp. 147-8)· a fact by no means congruous with his hypothesis.

Should Mr McLennan reply that on pp. 47-8 he has recognized the possibility, or probability, that there were tribes primordially endogamous—should he say that on pp 144-5 will be found the admission that perhaps exogamy and endogamy "may be equally archaic," the rejoinder is that besides being inconsistent with his belief that exogamy has "been practised at a certain stage among every race of mankind," this possibility is one which he practically rejects. On pp 148-50, he sketches out a series of changes by which exogamous tribes may eventually become endogamous, and in subsequent sections on the "Growth of Agnation," and "The Rise of Endogamy," he tacitly asserts that endogamy has thus developed if not without exception, still, generally. Indeed, the title of one of his chapters—"The Decay of Exogamy in Advancing Communities," clearly implies the belief that exogamy was general, if not universal, with the uncivilized, and that endogamy grew up along with civilization. Thus the incongruity between the propositions quoted in the last paragraph, cannot be escaped.

Sundry other of Mr. McLennan's reasonings conflict with one another. Assuming that in the earliest state, tribes were stock-groups "organized on the principle of exogamy," he speaks of them as having "the primitive instinct of the race against marriage between members of the same stock." (p 118.) Yet, as we have seen above, he elsewhere speaks of wife-capture as caused by scarcity of women within the tribe, and attributes to this "usage induced by necessity" the prejudice against "marrying women of their own stock." Moreover, if, as he says (and I believe rightly says) on p. 145, "men must originally have been free of any prejudice against marriage between relations," it seems inconsistent to allege that there was a "primitive instinct" "against marriage between members of the same stock"

Again, while in some places the establishment of the exogamous prejudice is ascribed to the practice of wife-stealing (p 53-4 and p 136) it is elsewhere made the antecedent of wife-stealing . interdict against marriage within the tribe was primordial. Now if this last is Mr M'Lennan's view, I agree with Sir J Lubbock in thinking that it is untenable It cannot be assumed that in these earliest groups of men, with which Mr M'Lennan commences, there were any established rules of marriage. Unions of the sexes must have preceded all social laws. The rise of a social law implies a certain preceding continuity of social existence, and this preceding continuity of social existence implies the reproduction of successive generations. Hence reproduction entirely unregulated by interdicts, must be taken as initial.

Assuming, however, that of his two views Mr M'Lennan will abide by the more tenable one, that wife-stealing led to exogamy, let us ask how far he is justified in alleging that female infanticide, and consequent scarcity of women, led to wife-stealing At first sight it appears undeniable that destruction of infant girls, if frequent, must have been accompanied by deficiency of adult females, and it seems strange to call in question the legitimacy of this inference But Mr. M'Lennan has overlooked a concomitant. Tribes in a state of chronic hostility are constantly losing their adult males, and the male mortality so caused is usually considerable Hence the killing many female infants does not necessitate lack of women. it may merely prevent excess. Excess must, indeed, be inevitable if, equal numbers of males and females being reared, some of the males are from time to time slain The assumption from which Mr. M'Lennan's argument sets out, is, therefore, inadmissible.

How inadmissible it is, becomes conspicuous on finding that where wife-stealing is now practised, it is commonly associated with polygyny. The Fuegians, named by Mr.

M'Lennan among wife-stealing peoples, are polygynists. According to Dove, the Tasmanians were polygynists, and Lloyd says that polygyny was universal among them; yet the Tasmanians were wife-stealers. The Australians furnish Mr. M'Lennan with a typical instance of wife-stealing and exogamy, and though Mr. Oldfield alleges scarcity of women among them, yet other testimony is quite at variance with his. Mitchell says —“Most of the men appeared to possess two [females], the pair in general consisting of a fat plump gin, and one much younger”, and according to the Frenchman Peltier, named in the last chapter as having lived seventeen years with the Macadama tribe in Queensland, the women were “more numerous than the men, every man having from two to five women in his suite.” In North America the Dakotahs are at once wife-stealers and polygynists, Burton tells us. In South America the Brazilians similarly unite these traits, and among the Caribs they are especially associated. Writing of polygyny as practised on the Orinoco, Humboldt says —“It is most considerable among the Caribs, and all the nations that have preserved the custom of carrying off young girls from the neighbouring tribes.” How then can wife-stealing be ascribed to scarcity of women?

A converse incongruity likewise militates against Mr. M'Lennan's theory. His position is that female infanticide, “rendering women scarce, led at once to polyandry within the tribe, and the capturing of women from without.” But polyandry does not, so far as I see, distinguish wife-stealing tribes. We do not find it among the above-named Tasmanians, Australians, Dakotahs, Brazilians, and although it is said to occur among the Fuegians, and characterizes some of the Caribs, it is much less marked than their polygyny. Contrariwise, though it is not a trait of peoples who rob one another of their women, it is a trait of certain rude peoples who are habitually peaceful. There is polyandry among the Esquimaux, who do not even know what

war is. There is polyandry among the Todas, who in no way aggress upon their neighbours

Other minor difficulties might be dwelt upon. There is the fact that in many cases exogamy and endogamy co-exist; as among the Comanches, the New Zealanders, the Lepchas, the Californians. There is the fact that in sundry cases polygyny and polyandry co-exist, as among the Fuegians, the Caribs, the Esquimaux, the Warans, the Hottentots, the ancient Britons. There is the fact that there are some exogamous tribes who have not the form of capture in marriage, as the Iroquois and the Chippewas. But not dwelling on these, I turn to certain cardinal difficulties, obvious *a priori*, which appear to me insuperable.

§ 286. Setting out with primitive homogeneous groups, Mr. McLennan contends that the scarcity of women caused by destruction of female infants, compelled wife-stealing, and he thinks that this happened "at a certain stage among every race of mankind" (p. 138) The implication is, therefore, that a number of adjacent tribes, usually belonging to the same variety of man in the same stage of progress, were simultaneously thus led to rob one another. But immediately we think of wife-stealing as a practice not of one tribe only, but of many tribes forming a cluster, there presents itself the question—How was the scarcity of wives thus remedied? If each tribe had fewer women than men, how could the tribes get wived by taking one another's women? The scarcity remained the same what one tribe got another lost. Bearing in mind the low fertility and great infant mortality among savages, if there is a chronic deficiency of women and the tribes rob one another equally, the result must be diminished population in all the tribes. If some, robbing others in excess, get enough wives, and leave certain of the rest with very few, these must tend towards extinction. And if the surviving tribes carry on the process, there appears no limit until the strongest tribe,

continuing to supply itself with women from the less strong, finally alone survives and has no tribes to rob.

Should it be replied that female infanticide is, on the average of cases, not carried so far as to make the number of wives insufficient to maintain the aggregate population—should it be said that only exceptional tribes rear so few women as not to have mothers enough to produce the next generation, then we are met by a still greater difficulty. If in each of the exogamous tribes forming the supposed cluster, the men are forbidden to marry women of their own tribe, and must steal women from other tribes, the implication is that each tribe knowingly rears wives for neighbouring tribes, but not for itself. Though each tribe kills many of its female infants that it may not be at the cost of rearing them for its own benefit, yet it deliberately rears the remainder for the benefit of its enemies. Surely this is an inadmissible supposition. In proportion as the interdict against marrying women within the tribe is peremptory, the preservation of girls will be useless—worse than useless, indeed, since adjacent hostile tribes, to whom they must go as wives, will be thereby strengthened. And as all the tribes, living under like interdicts, will have like motives, they will all of them cease to rear female infants.

Manifestly, then, exogamy in its original form, can never have been anything like absolute among the tribes forming a cluster, but can have been the law among some of them only.

§ 287. In his concluding chapter, Mr. McLennan says that “on the whole, the account which we have given of the origin of exogamy, appears the only one which will bear examination.” (p. 289) It seems to me, however, that setting out with the postulate laid down by him, that primitive groups of men are habitually hostile, we may, on asking what are the concomitants of war, be led to a different theory, open to none of the objections above raised.

In all times and places, among savage and civilized, vic-

tory is followed by pillage. Whatever portable things of worth the conquerors find, they take. The enemies of the Fuegians plunder them of their dogs and arms, pastoral tribes in Africa have their cattle driven away by conquering marauders, and peoples more advanced are robbed of their money, ornaments, and all valuable things that are not too heavy. The taking of women is manifestly but a part of this process of spoiling the vanquished. Women are prized as wives, as concubines, as drudges, and, the men having been killed, the women are carried off along with the other moveables. Everywhere among the uncivilized we find this. Turner tells us that "in Samoa, in dividing the spoil of a conquered people, the women were not killed, but taken as wives." We learn from Mitchell that in Australia, "on some whites telling a native that they had shot a man of another tribe, his only remark was — 'Stupid whitefellows! why did you not bring away the gins?'" And P. Martyr says that among the cannibal Caribs in his day, "to eat women was considered unlawful * * * Those who were captured young were kept for breeding, as we keep fowl, etc." Early legends of the semi-civilized show us the same thing, as when in the *Iliad* we read that the Greeks plundered "the sacred city of Eetion," and that part of the spoils "they divided among themselves" were the women. And there need no examples to recall the fact that in later and more civilized times, successes in battle have been followed by transactions allied in character, if not the same in form. Hence it is obvious that from the beginning down to comparatively late stages, women-stealing has been an *incident* of successful war.

Observe, next, that the spoils of conquest, some of them prized for themselves, are some of them prized as trophies. Proofs of prowess are above all things treasured by the savage. He brings back his enemy's scalp, like the North American Indian. He dries and preserves his enemy's head, like the New Zealander. He fringes his robe with

locks of hair cut from his slain foe. Among other signs of success in battle is return with a woman of the vanquished tribe. Beyond her intrinsic value she has an extrinsic value. Like a native wife, she serves as a slave; but unlike a native wife, she serves also as a trophy. As, then, among savages, warriors are the honoured members of the tribe—as, among warriors, the most honoured are those whose bravery is best shown by achievements, the possession of a wife taken in war becomes a badge of social distinction. Hence members of the tribe thus married to foreign women, are held to be more honourably married than those married to native women. What must result?

In a tribe not habitually at war, or not habitually successful in war, no decided effect is likely to be produced on the marriage customs. If the great majority of the men have native wives, the presence of a few whose superiority is shown by having foreign wives, will fail to change the practice of taking native wives: the majority will keep one another in countenance. But if the tribe, becoming more successful in war, robs adjacent tribes of their women more frequently, there will grow up the idea that the now-considerable class having foreign wives form the honourable class, and that those who have not proved their bravery by bringing back these living trophies are dishonourable. Non-possession of a foreign wife will come to be regarded as a proof of cowardice. An increasing ambition to get foreign wives will therefore arise, and as the number of those who are without them decreases, the brand of disgrace attaching to them will grow more decided, until, in the most warlike tribes, it becomes an imperative requirement that a wife shall be obtained from another tribe—if not in open war, then by private abduction.

A few facts showing that by savages proofs of courage are often required as qualifications for marriage, will carry home this conclusion. Herndon tells us that among the Mahués, a man cannot take a wife until he has sub-

mitted to severe torture. Bates, speaking of the Passés on the Upper Amazons, says that formerly "the young men earned their brides by valiant deeds in war." Before he is allowed to marry, a young Dyak must prove his bravery by bringing back the head of an enemy. Bancroft quotes Colonel Cremony as saying that when the Apaches warriors return unsuccessful, "the women turn away from them with assured indifference and contempt. They are upbraided as cowards, or for want of skill and tact, and are told that such men should not have wives." That among other results of sentiments thus exemplified, abduction of women will be one, is obvious, for a man who, denied a wife till he has proved his courage, steals one, satisfies his want and achieves reputation at the same time. If, as we see, the test of deserving a wife is in some cases obtainment of a trophy, what more natural than that the trophy should often be the stolen wife herself? What more natural than that where many warriors of the tribe are distinguished by stolen wives, the stealing of a wife should become the required proof of fitness to have one? Hence would follow a peremptory law of exogamy.

In so far as it implies that usage grows into law, this interpretation agrees with that of Mr M'Lennan. It does not, however, like his, assume either that this usage originated in a primordial instinct, or that it resulted from scarcity of women caused by infanticide. Moreover, unlike Mr M'Lennan's, the explanation so reached is consistent with the fact that exogamy and endogamy in many cases co-exist, and with the fact that exogamy often co-exists with polygyny. Further, it does not involve us in the difficulty raised by supposing a peremptory law of exogamy to be obeyed throughout a cluster of tribes.

§ 288. But can the great prevalence of the form of capture in marriage ceremonies be thus accounted for? Mr. M'Lennan believes that wherever this form is now found,

complete exogamy once prevailed. Examination will, I think, show that the implication is not necessary. There are several ways in which the form of capture naturally arises; or rather, let us say, it has several conspiring causes.

If, as we have seen, there still exist rude tribes in which men fight for possession of women, the taking possession of a woman naturally comes as a sequence to an act of capture. That monopoly which constitutes her a wife in the only sense known by the primitive man, is a result of successful violence. Thus the form may originate from actual capture within the tribe, instead of originating from actual capture without it.

Beyond that resistance to a man's seizure of a woman apt to be made by other men within the tribe, there is the resistance of the woman herself. Sir John Lubbock expresses the opinion that female coyness is not an adequate cause for the establishment of the form of capture, and it may be that, taken alone, it does not suffice to account for everything. But there are reasons for thinking it an important factor. Here are some of them. Crantz tells us concerning the Esquimaux, that when a damsel is asked in marriage, she—

“directly falls into the greatest apparent consternation, and runs out of doors tearing her bunch of hair, for single women always affect the utmost bashfulness and aversion to any proposal of marriage, lest they should lose their reputation for modesty.”

Like behaviour is shown by Bushmen girls. When—

“a girl has grown up to womanhood without having previously been betrothed, her lover must gain her own approbation, as well as that of the parents, and on this occasion his attentions are received with an affectation of great alarm and disinclination on her part, and with some squabbling on the part of her friends.”

Again, among the Sinai Arabs, says Burckhardt, a bride—

“defends herself with stones, and often inflicts wounds on the young men, even though she does not dislike the lover, for, according to custom, the more she struggles, bites, kicks, cries, and strikes, the more she is applauded ever after by her own companions.” During the pro-

cession to the husband's camp, "decency obliges her to cry and sob most bitterly"

Of the Muzos, Piedrahita narrates that after agreement with the parents was made—

"the bridegroom came to see the bride, and stayed three days caressing her, while she replied by beating him with her fists and with sticks After these three days she got tamer, and cooked his meals"

In these cases, then, coyness, either real or affected for reputation's sake, causes resistance of the woman herself. In other cases there is joined with this the resistance of her female friends. We read of the Sumatran women that "both the bride and her female relatives make it a point of honour to prevent (or appear to prevent) the bridegroom from obtaining his bride" On the occasion of a marriage among the Araucanians, Smith tells us that "the women spring up *en masse*, and arming themselves with clubs, stones, and missiles of all kinds, rush to the defence of the distressed maiden * * * It is a point of honour with the bride to resist and struggle, however willing she may be" And once more we learn from Grieve that when a Kamtschadale "bridegroom obtains the liberty of seizing his bride, he seeks every opportunity of finding her alone, or in company of a few people, for during this time all the women in the village are obliged to protect her"

Here we have, I think, proof that one origin of the form of capture is feminine opposition—primarily of the woman herself, and secondarily of female friends who naturally sympathize with her. Though the manners of the inferior races do not imply much coyness, yet we cannot suppose coyness to be wholly absent. Hence that amount of it which really exists, joined with that further amount simulated for reputation's sake, will make resistance, and consequently capture, natural phenomena Moreover, since a savage makes his wife a slave, and usually treats her brutally, she has an additional motive for resistance.

Nor does forcible opposition proceed only from the girl and her female friends: the male members of her

family also are likely to be opponents. A woman is of value not only as a wife, but also as a daughter; and all through, from the lowest to the highest stages of social progress, we find a tacit or avowed claim to her services by her father. It is so even with the degraded Fuegians an equivalent in the shape of service rendered has to be given for her by the youth, "such as helping to make a canoe" It is so with numerous more advanced savages all over the world there is either the like giving of stipulated work, or the giving of a price And we have evidence that it was originally so among ourselves in an action for seduction the deprivation of a daughter's services is the injury alleged. Hence it is inferable that in the rudest states, where claims, parental or other, are but little regarded, the taking away of a daughter is likely to become the occasion of a fight. Facts support this conclusion Of the Araucanians Smith tells us that when there is opposition of the parents, "the neighbours are immediately summoned by blowing the horn, and chase is given" "Among the Gándors, a tribe on the southern shores of the Caspian Sea, the bridegroom must run away with his bride, although he thereby exposes himself to the vengeance of her parents, who, if they find him within three days, can lawfully put him to death" And we read concerning the Gonds that "a suitor usually carries off the girl that is refused to him by the parents." Thus we find a further natural cause for the practice of capture—a cause which must have been common before social usages were well established Indeed, on reading that among the Mapuchés the man sometimes "lays violent hands upon the damsel, and carries her off," and that "in all such cases the usual equivalent is afterwards paid to the girl's father," we may suspect that abduction, spite of parents, was the primary form, that there came next the making of compensation to escape vengeance, that this grew into the making of presents beforehand; and that so resulted eventually the system of purchase

If, then, within a tribe there are three sources of opposition to the appropriation of a woman by a man, it does not seem that the form of capture is inexplicable unless we assume the abduction of women from other tribes

But even supposing it to have originated in the capture of foreign women, its survival as a marriage-ceremony would not prove exogamy to have been the law. In a tribe whose warriors had many of them wives taken from enemies, and who, as having captured their wives, were regarded as more honourably married than the rest, there would result an ambition, if not to capture a wife, still to seem to capture a wife. In every society the inferior ape the superior, and customs thus spread among classes the ancestors of which did not observe them. The antique-looking portraits that decorate many a modern large house, by no means demonstrate the distinguished ancestry of the owner, but may merely simulate a distinguished ancestry. The coat of arms a wealthy man bears, does not necessarily imply descent from men who once had their shields and flags covered by such marks of identity. The plumes borne on a hearse, do not prove that the dead occupant had forefathers who wore knightly decorations. And similarly, it does not follow that all the members of tribes who go through the form of capturing their wives at marriage, are descendants of men who in earlier days actually captured their wives. Mr McLennan himself points out that, among sundry ancient peoples, captured wives were permitted to the military class though not to other classes. If we suppose a society formed of a dominant military class, originally the conquerors, who practised wife-capture, and a subject class who could not practise it; and if we ask what would happen when such a society fell into more peaceful relations with adjacent like societies, and obtained wives from them no longer by force, but by purchase or other friendly arrangement, we may see that, in the first place, the form of capture would replace the actuality of capture in the marriages

of this dominant class; for, as Mr. McLennan contends, conformity to ancestral usage would necessitate the simulation of capture after actual capture has ceased. And when, in the dominant class, wife-capture had thus passed into a form, it would be imitated by the subject class as being the most honourable form. Such among the inferior as had risen to superior social positions would first adopt it, and they would gradually be followed by those below them. So that, even were there none of the other probable origins named above, a surviving form of capture in any society would not necessarily show that society to have been exogamous; but would merely show that wife-capture was in early times practised by its leading men.

§ 289. And now, pursuing the argument, let us see whether exogamy and endogamy are not simultaneously accounted for as correlative results of the same differentiating process. Setting out with a state in which the relations of the sexes were indefinite, variable, and determined by the passions and circumstances of the occasion, we have to explain how exogamy and endogamy became established, the one here, the other there, as consequences of surrounding conditions. The efficient conditions were the relations to other tribes, now peaceful but usually hostile, some of them strong and some of them weak.

Necessarily, a primitive group not commonly at war with neighbouring groups, must be endogamous; for the taking of women from other tribes is either a sequence of open war, or is an act of private war which brings on open war. Pure endogamy, however, resulting in this manner, is probably rare; since the hostility of tribes is almost universal. But endogamy is likely to characterize not peaceful groups alone, but also groups habitually worsted in war. An occasional abducted woman taken in reprisal, will not suffice to establish in a weak tribe any precedent for wife-capture, but, contrariwise, a member of such a tribe who carries off

a woman, and so provokes the vengeance of a stronger tribe robbed, is likely to meet with general reprobation.* Hence marrying within the tribe will not only be habitual, but there will arise a prejudice, and eventually a law, against taking wives from other tribes: the needs of self-preservation will make the tribe endogamous. This interpretation harmonizes with the fact, admitted by Mr. M'Lennan, that the endogamous tribes are as numerous as the exogamous; and also with the fact he admits, that in sundry cases clusters of tribes allied by blood and language are some of them exogamous and some endogamous.

It is to be inferred that among tribes not differing much from one another in strength, there will be continual aggressions and reprisals, accompanied by mutual robberies of women. No one of them will be able to supply itself with wives entirely at the expense of adjacent tribes, and hence, in each of them, there will be both native wives and wives taken from other tribes: there will be both exogamy and endogamy. Stealing of wives will not be reprobated, because the tribes robbed are not too strong to be defied; and it will not be insisted on, because the men who have stolen wives will not be numerous enough to determine the average opinion.

If, however, in a cluster of tribes one gains predominance by frequent successes in war—if the men in it who have stolen wives come to form the larger number—if the possession of a stolen wife becomes a mark of that bravery without which a man is not worthy of a wife, then the discreditable of marrying within the tribe, growing into

* Since the above sentence was written, I have, by a happy coincidence, come upon a verifying fact, in the just-published *Life in the Southern Isles*, by the Rev Mr Gull (p 47). A man belonging to one of the tribes in Mangaa stole food from an adjacent tribe. This adjacent tribe avenged itself by destroying the houses, etc., of the thief's tribe. Thereupon the thief's tribe, angry because of the mischief thus brought upon them, killed the thief. If this happened with a stealer of food, still more would it be likely to happen with a stealer of women, when the tribe robbed was the more powerful.

disgracefulness, will end in a peremptory requirement to get a wife from another tribe—if not in open war, then by private theft. the tribe will become exogamous. A sequence may be traced. The exogamous tribe thus arising, and growing while it causes adjacent tribes to dwindle by robbing them, will presently divide; and its sections, usurping the habitats of adjacent tribes, will carry with them the established exogamous habit. When, presently becoming hostile, these diverging sub-tribes begin to rob one another of women, there will arise conditions conducive to that internal exogamy which Mr. McLennan supposes, rightly I think, to replace external exogamy. For unless we assume that in a cluster of tribes, each will undertake to rear women for adjacent tribes to steal, we must conclude that the exogamous requirement will be met in a qualified manner. Wives born within the tribe but foreign by blood, will, under pressure of the difficulty, be considered allowable, instead of actually stolen wives. And thus, indeed, that kinship in the female line which primitive irregularity in the relations of the sexes originates, will become established, even though male parenthood is known, since this interpretation of kinship will make possible conformity to a law of *connubium* that could not otherwise be obeyed.

§ 290 Nothing of much importance is to be said respecting exogamy and endogamy in their general bearings on social life.

Exogamy in its primitive form is clearly an accompaniment of the lowest barbarism; and it decreases as the hostility of societies becomes less constant, and the usages of war mitigated. That the implied crossing of tribal stocks, where these tribal stocks are very small, may be advantageous, physiologically, is true; and exogamy may so secure a benefit which at a later stage is secured by the mingling of conquering and conquered tribes; though none who bear in mind the thoughtlessness of savages will sup-

pose such a benefit to have been contemplated. But the exogamous custom as at first established, implies an extremely abject condition of women, a brutal treatment of them, an entire absence of the higher sentiments that accompany the relations of the sexes. Associated with the lowest type of political life, it is also associated with the lowest type of domestic life.

Evidently endogamy, which at the outset must have characterized the more peaceful groups, and which has prevailed as societies have become less hostile, is a concomitant of the higher forms of the family.

[The above chapter, written before the middle of September, I have kept standing in type for several weeks: being deterred from printing by the announcement that a second edition of Mr. M'Lennan's work was coming out, and by the thought that perhaps amendments contained in it might entail some modifications of my criticisms. Circumstances, however, have prevented Mr. M'Lennan from changing his exposition. In the preface to this new edition he says:—

“Though I am again free to resume the studies necessary for its revision, it is uncertain whether I could soon revise it in a satisfactory manner—so that I am without an answer to representations made to me, that it is better it should be made accessible to students with its imperfections than that it should remain inaccessible to them. I have done this the more readily that, on the whole, I still adhere to the conclusions I had arrived at more than eleven years ago, on the various matters which are discussed in ‘Primitive Marriage.’”

I now, therefore, send the foregoing pages to the press unaltered. The quotations are, of course, from the first edition, the paging of which does not correspond with that of the second. I have not, however, thought it needful, or indeed, desirable, to change the references, since the first edition is at present, and probably will for some time be, more widely diffused than the second.]

CHAPTER V.

PROMISCUITY.

§ 291. ALREADY, in the chapter on "The Primitive Relations of the Sexes," illustrations have been given of the indefiniteness and inconstancy of the connexions between men and women in low societies. The wills of the stronger, unchecked by political restraints, unguided by moral sentiments, determine all behaviour. Forcibly taking women from one another, men recognize no tie between the sexes save that which might establishes and liking maintains. To the instances there given, others may be added, showing that at first, marriage, as we understand it, hardly exists.

Bancroft quotes Poole as saying of the Haidahs that the women "cohabit almost promiscuously with their own tribe, though rarely with other tribes." According to Captain Taylor, the Hill-tribes of the Piney Hills, Madura district, have very few restrictions upon promiscuous intercourse. Describing a people inhabiting the Neilgherry Hills, Captain Harkness says—"They [two Erulars] informed us that the Erulars have no marriage contract, the sexes cohabiting almost indiscriminately; the option of remaining in union or of separating resting principally with the female." Of another Indian people, the Teehurs, it is said that they "live together almost indiscriminately in large communities, and even when two people are regarded

as married the tie is but nominal" And according to a Brahmin sepoy who lived more than a year with the Andamanese, promiscuity is so far sanctioned among them by public opinion, that a man who is refused by an unmarried woman "considers himself insulted," and sometimes takes summary vengeance.

As shown by instances before given, this state of things is in many low tribes very little qualified by such form of union as stands for marriage; which sometimes has not even a name. Temporary fancies determine the connexions and mere whims dissolve them. What is said of the Mantras, who marry without acquaintance and divorce for trifles, and among whom some men marry "forty or fifty" times, may be taken as typical.

§ 292. Facts of this kind are thought by several writers to imply that the primitive condition was one of unqualified hetairism. Complete promiscuity is held to have been not simply the practice but in some sort the law. Indeed, the name "communal marriage" has been proposed by Sir John Lubbock for this earliest phase of the sexual relations, as implying recognized rights and bonds. I do not think the evidence warrants us in concluding that promiscuity ever existed in an unqualified form; and it appears to me that even had it so existed, the name "communal marriage" would not convey a true conception of it.

As before contended, the initial social state must have been one in which there were no social laws. Social laws presuppose continued social existence; and continued social existence presupposes reproduction through successive generations. Hence there could, at first, have been no such social law as that of "communal marriage, where every man and woman in a small community were regarded as equally married to one another"—there could have been no conception of "communal marriage rights" The words "marriage" and "rights" as applied to such a state have,

it seems to me, misleading connotations. Each implies a claim and a limitation. If the claim is co-extensive with the members of the tribe, then the only limitation must be one excluding members of other tribes; and it cannot, I think, be said that the idea of marriage within a tribe is generated by the negation of the claims of those belonging to other tribes

But passing over the terminology, let us consider the essential question raised—whether what we may call tribal monopoly of its women, regarded as a common possession held against other tribes, preceded individual monopoly within the tribe. Sir John Lubbock considers that absence of individual marital possession went along with absence of individual possession generally while the notion of private ownership of other things did not exist, there did not exist the notion of private ownership of women. Just as in the earliest stages the tribal territory was common property, so, too, he thinks, were the women of the tribe common property; and he thinks that private ownership of women was established only by stealing them from other tribes women so obtained being recognized as belonging to their captors. But while concurring in the belief that the development of the conception of property in general, has had much to do with the development of the marital relation, it is quite possible to dissent from the belief that the conception of property was ever so undeveloped as Sir John Lubbock's conclusion implies. It is true that the idea of ownership which a tribe has in the territory it occupies, may be compared to that of many animals, solitary and gregarious, which drive trespassers away from their lairs or habitats even the swans on each reach of the Thames resist invading swans from other reaches; and the public dogs in each quarter of Constantinople attack dogs from other quarters if they encroach. It is true, also, that generally among savages there is a certain community of property in the game captured, though not an unqualified community. But the reason for

all this is clear. Land is jointly held by hunters because it cannot be otherwise held; and joint claims to the food it produces are involved. To infer that there is not in the earliest state a recognition of individual property in other things, is, I think, going further than either the probabilities or the facts warrant. The dog shows us some notion of ownership—will not only fight for the prey he has caught, or for his kennel, but will keep guard over his master's clothes or other belongings. We cannot suppose that man in his rudest state had less notion of ownership than this. We must suppose he had more; and our supposition is justified by evidence. Habitually savages individually own their weapons and implements, their decorations, their dresses. Even among the degraded Fuegians there is private property in canoes. Indeed, the very conception of prospective advantage which leads an intelligent being to take possession of, or to make, any useful thing, is a conception which leads him to resist the abstraction of that thing. Generally, possession of it is not interfered with, because the thing is not worth the risk of a fight; and even where, after resistance, it is taken by another, still it comes to be held by that other individually. The impulses which lead primitive men thus to monopolize other objects of value, must lead them to monopolize women. There must arise private ownerships of women, ignored only by the stronger, who establish other private ownerships.

And this conclusion seems to me the one supported by the facts. Everywhere promiscuity, however marked, is qualified by unions having some persistence. If, in the various cases before named, as also among the Aleutian Islanders and the Kutchins of North America, the Badagas, Kurumbahs and Koriahs of India, the Hottentots and various other peoples of Africa, there is no marriage ceremony; we have in the very statement an implication that there is something having the nature of marriage. If, as with the North American tribes generally, "nothing more than

the personal consent of the parties," unsanctioned and unwitnessed, occurs; still some kind of union is alleged. If, as among the Bushmen and the Indians of California, there is not even a word signifying this relation between the sexes; still there is evidence that the relation is known. If among such people as the Teehurs of Oude, the general promiscuity is such that "even when two people are regarded as married the tie is but nominal," still, some "are regarded as married." The very lowest races now existing—Fuegians, Australians, Andamanese—show us that, however informally they may originate, sexual relations of a more or less enduring kind exist; and I do not see reasons for concluding that in social groups lower than these, there was no individual possession of women by men. We must, I think, infer, that even in prehistoric times, promiscuity was checked by the establishment of individual connexions, prompted by men's likings and maintained against other men by force.

§ 293. Admitting, however, that in the earliest stages promiscuity was but in a small degree thus qualified, let us note, first, the resulting ideas of kinship.

Causes direct and indirect, will conspire to produce recognition of relationship in the female line only. Necessarily if promiscuity is extensive, and if there is a larger number of children born to unknown fathers than to known fathers, it must happen that as the connexion between mother and child is obvious in all cases, while that between father and child is inferable only in some cases, there will arise a habit of thinking of maternal kinship rather than of paternal. Hence, even in that minority of cases where paternity is manifest, children will be thought of and spoken of in the same way. Among ourselves common speech habitually indicates a boy as Mr So-and-so's son, though descent from his mother is as fully recognized; and a converse usage, caused by prevailing promiscuity among savages, will

lead to the speaking of a child as the mother's child, even when the father is known.

A further cause for the establishment of this practice exists. Though we conclude that promiscuity is in all cases qualified by unions having some duration, yet we see that in the lowest stages, as among the Andamanese, each of these unions ends when a child is weaned: the result being that thereafter, association of the child with its father ceases, while association with its mother continues. Consequently, even when there is acknowledged paternity, the child will be mostly thought of in connexion with its mother; and thus will be confirmed the habit otherwise caused.

This habit having arisen, the resulting system of kinship in the female line will, as we have seen, be strengthened by the practice of exogamy when passing from the external to the internal form. The requirement that a wife shall be taken from a foreign tribe, readily becomes confounded with the requirement that a wife shall be of foreign blood. If maternal descent only is recognized, the daughters of foreign women within the tribe will, as Mr. McLennan argues, be rendered available as wives under the law of exogamy, and the custom of so regarding them will be strengthened by making fulfilment of this law possible, when otherwise fulfilment would be impossible. A settled system of kinship through females, and interdict against marriage with those having the same family name, or belonging to the same clan, will result.

Instances collected by Mr McLennan and Sir John Lubbock, show that this system "prevails throughout Western and Eastern Africa, in Circassia, Hindostan, Tartary, Siberia, China, and Australia, as well as in North and South America." For interpreting it in the above manner there are some additional reasons. One is that we are not obliged to make the startling assumption that male parentage was at first entirely unperceived. A second is that we escape an inconsistency. Male parentage is habitually known, though

disregarded, where the system of kinship in the female line now obtains ; for not only in the lowest races are there unions persistent enough to make male parentage manifest, but the very statement that female kinship is alone counted, cannot be made by these races without implying a consciousness of male kinship. nay, indeed, have not these races, down to the very lowest, always a word for father as well as a word for mother ? And a third is that commonly the names of the clans which are forbidden to intermarry, such as Wolf, Bear, Eagle, Whale, etc., are names given to men, implying, as I have before contended (§ 170-3) descent from distinguished male ancestors bearing those names—descent which, notwithstanding the system of female kinship, was remembered where there was pride in the connexion.*

§ 294. From the effects of unregulated relations of the sexes on the system of formally-recognized kinship, in pursuing which I have diverged somewhat from the immediate topic, let us now pass to the effects on the society and its individuals.

In proportion to the prevalence of promiscuity, there must be paucity and feebleness of relationships. Besides having no known male parents, the children of each mother are less connected with one another. They are only half-brothers and half-sisters. Family bonds, therefore, are not

* I may add here a conclusive proof that avowed recognition of kinship in the female line only, by no means shows an unconsciousness of male kinship. This proof is furnished by that converse custom which some ancient Aryans had of recognizing relationship through males, and ignoring relationship through females. When Orestes, after killing his mother for murdering his father, was absolved on the ground urged by him, that a man is related to his father and not to his mother, undeniable evidence was given that an established doctrine of kinship may disregard a connexion which is obvious to all—more obvious than any other. And if it cannot be supposed that an actual unconsciousness of motherhood was associated with this system of exclusive kinship through males among the Greeks, then there is no adequate warrant for the supposition that actual unconsciousness of fatherhood was associated with the system of exclusive kinship through females among savages.

only weak but cannot spread far; and this implies defect of cohesion among members of the society. Though they have some common interests, with some vague notion of general kinship, there lacks that element of strength arising from the interests within groups distinctly related by blood. At the same time, the establishment of subordination is hindered. Nothing beyond temporary predominance of the stronger is likely to arise in the absence of definite family and definite descent: there can be no settled political control. For the like reason the growth of ancestor-worship, and of the religious bonds resulting from it, are impeded. Thus in several ways indefinite sexual relations hinder social self-preservation and social evolution.

Their unfavourableness to the welfare of offspring scarcely needs pointing out. Where paternity is not recognized, children must depend almost wholly on maternal care. Among savages, exposed as they are to every kind of privation, the rearing of children is in all cases difficult, and it is necessarily more difficult where the mother is unaided by the father. So too is it, if in a smaller degree, with the progeny of brief marriages, such as those of the Andamanese, whose custom it is for man and wife to part when a child born to them is weaned. Often the child must afterwards die from lacking adequate support and protection, which the mother alone cannot give. No doubt, under such conditions, miscellaneous help is given. Indeed, the Andamanese women are said to aid one another in suckling, and probably food and other things are furnished by the men: the child becomes, in a measure, the child of the tribe. But indefinite tribal care can but partially replace definite paternal care. How unfavourable to the maintenance of population are these unregulated relations of the sexes, we have, indeed, direct evidence. A recent reporter, Mr. Francis Day, a surgeon, says that the Andamanese appear to be gradually dying out. He saw but one woman who had as many as three living children. During

a year, thirty-eight deaths were reported and only fourteen births, among the families living near the European settlements.

Turning from progeny to parents, it is clear that to them also the absence of persistent marital relations is extremely injurious. Maintenance of the race, in so far as it is effected, is effected at an excessive cost to the women, and though the men may not suffer directly, yet they suffer indirectly. After the vigour of maturity is past, there come the privations of an early decline unmitigated by domestic assistance. Mr. Day says of the Andamanese that few appear to live to a greater age than forty, and they are subject to a variety of diseases. Absence of those higher gratifications accompanying developed family life, is also to be noted as a concomitant evil

Irregular relations of the sexes are thus at variance with the welfare of the society, of the young, and of the adults. We before saw that in all respects the traits of the primitive man—physical, emotional, intellectual—are immense hindrances to social evolution, and here we see that his lack of those sentiments which lead to persistent marriages, constitutes a further hindrance.

§ 295 Out of this lowest state, however, there tend to arise higher states. In two ways do groups thus loose in their sexual relations, evolve into groups having sexual relations of more definite kinds.

If, as we have concluded, prevailing promiscuity was from the first accompanied by unions having some duration—if, as we may infer, the progeny of such unions were more likely to be reared, and more likely to be vigorous, than the rest; then the average result must have been multiplication and predominance of individuals derived from such unions. And bearing in mind that among these there would be inherited, natures leaning towards such unions more than other natures leaned, we

must infer that there would, from generation to generation, be an increasing tendency to such unions along certain lines of descent. Where they favoured race-maintenance, survival of the fittest would further the establishment of them. I say advisedly—where they favoured race-maintenance, because it is conceivable that in very barren habitats they might not do this. Sexual relations conducive to the rearing of many children would be of no advantage. the food would not suffice. It may be, too, that in very inclement habitats more careful nurture would be useless; since where the hardships to be borne in adult life were extreme, the raising of children that could not bear them would not help to preserve the society—nay, by wasting food and effort, might prove detrimental. The ability of a child to survive with no care beyond that which its mother can give, may in some circumstances be a test of fitness for the life to be led. But save in such extreme cases, the favourable effects on offspring must tend to establish in a social group, persistent relations of the sexes

The struggle for existence between societies conduces to the same effect. Subject to the foregoing limitation, whatever increases the power of a tribe, either in numbers or in vigour, gives it an advantage in war; so that other things equal, societies characterized by sexual relations that are the least irregular, will be the most likely to conquer. I say other things equal, because co-operating causes interfere. Success in battle does not depend wholly on relative numbers or relative strengths. There come into play courage, endurance, swiftness, agility, skill in the use of weapons. Though otherwise inferior, a tribe may conquer by the quickness of its members in tracking enemies, by cunning in ambush, etc. Moreover, if among a number of adjacent tribes there are no great differences in degrees of promiscuity, conflicts among them cannot tend to establish higher sexual relations. Hence, only an occasional effect can be produced; and we may anticipate

that which the facts indicate—a slow and very irregular diminution. In some cases, too, profusion of food and favourable climate, may render less important the advantage which the offspring of regular sexual relations have over those of irregular ones. And this may be the reason why in a place like Tahiti, where life is so easily maintained and children so easily reared, great sexual irregularity was found to co-exist with large population and considerable social advance.

As, however, under ordinary conditions the rearing of more numerous and stronger offspring must have been favoured by more regular sexual relations, there must, on the average, have been a tendency for the societies most characterized by promiscuity to disappear before those less characterized by it.

§ 296 Considering the facts from the evolution point of view, we see that at first the domestic relations are but little more developed than the political relations. incoherence and indefiniteness characterize both.

From this primitive stage, domestic evolution takes place in several directions by increase of coherence and definiteness. Connexions of a more or less enduring kind are in some cases formed between one woman and several men. In some cases, and very commonly, enduring connexions are formed between one man and several women. Such relations co-exist in the same tribe, or they characterize different tribes; and along with them there usually co-exist relations between individual men and individual women. The evidence implies that all these marital forms by which promiscuity is restricted, have equally early origins.

The different types of the family thus initiated, have now to be considered. We will take them in the above order.

CHAPTER VI.

POLYANDRY.

§ 297. PROMISCUITY may be called indefinite polyandry joined with indefinite polygyny; and one mode of advance is by a diminution of the indefiniteness.

Concerning the Fuegians, Admiral Fitzroy says —“ We have some reason to think there were parties who lived in a promiscuous manner—a few women being with many men ”· a condition which may be regarded as promiscuity to a slight degree limited But not dwelling on this doubtfully-made statement, let us pass to positive statements concerning what may be described as definite polyandry joined with definite polygyny. Of the Todas, we are told by Shortt that—

“ If there be four or five brothers, and one of them, being old enough, gets married, his wife claims all the other brothers as her husbands, and as they successively attain manhood, she consorts with them, or if the wife has one or more younger sisters, they in turn, on attaining a marriageable age, become the wives of their sister's husband or husbands, and thus in a family of several brothers, there may be, according to circumstances, only one wife for them all, or many, but, one or more, they all live under one roof, and cohabit promiscuously ”

Akin to this arrangement, though differing in the respect that the husbands are not brothers, is that which exists among the Nairs. From several authorities Mr. McLennan takes the statements that—

“ It is the custom for one woman ‘ to have attached to her two males, or four, or perhaps more, and they cohabit according to rules.’ With

this account that of Hamilton agrees, excepting that he states that a Nair woman could have no more than twelve husbands, and had to select these under certain restrictions as to rank and caste. On the other hand, Buchanan states that the women after marriage are free to cohabit with any number of men, under certain restrictions as to tribe and caste. It is consistent with the three accounts, and is directly stated by Hamilton, that a Nair may be one in several combinations of husbands."

Here, then, along with polyandry to some extent defined, there goes polygyny, also to some extent defined. And with the semi-civilized Tahitians, one of the several forms of sexual relations was akin to this. Ellis says that "those among the middle or higher ranks who practised polygamy allowed their wives other husbands."

From these forms of the family, if the word may be extended to them, in which polyandry and polygyny are united, we pass to those forms which come under the head of polyandry proper. In one of them the husbands are not related, in the other they are akin, and usually brothers.

§ 298. Already we have seen that polyandrous households, apparently of the ruder sort, occur in tribes having also polygynous households the Caribs, the Esquimaux, and the Warans, having been instanced. Another case is furnished by the Aleutian Islanders, who are polygynists, but among whom, according to Bastian, a "woman may enter into a double marriage, inasmuch as she has a right to take" an additional husband. The aborigines of the Canary Islands practised polyandry, probably not fraternal. Humboldt tells us that when the Spaniards arrived at Lancerota, they found "a very singular custom. * * * A woman had several husbands * * * A husband was considered as such only during a lunar revolution." And to these cases of the ruder polyandry which I find among my own data, I may add others given by Mr M'Lennan: he names the Kasias and the Saporogian Cossaks as exemplifying it.

Of the higher form of polyandry, many instances occur: sometimes co-existing in the same society with the lower form, and sometimes existing alone. Tennent tells us that

“Polyandry prevails throughout the interior of Ceylon, chiefly amongst the wealthier classes, of whom, one woman has frequently three or four husbands, and sometimes as many as seven * * * As a general rule the husbands are members of the same family, and most frequently brothers.”

Of other peoples definitely stated to practise this kind of polyandry, Mr. McLennan enumerates, in America the Avaroes and the Maypures, and in Asia those of Kashmir, Ladak, Kinawer, Kistewar, and Sirmor. That it existed in ancient times where it is not known now, we have also indications. Strabo relates of the tribes of Arabia Felix that all of the same family married one wife in common. In an ancient Hindu epic, the *Mahabharata*, a princess is described as married to five brothers. And, according to Cæsar, there was fraternal polyandry among the Ancient Britons.

§ 299. What are we to say concerning the origin and development of this type of the domestic relations?

As before contended, facts do not support the belief that it arose from female infanticide and consequent scarcity of women. We saw that it does not prevail where wife-stealing, said also to result from scarcity of women, is habitual, but that in such cases polygyny is the more usual. We also saw that its frequent co-existence with polygyny negatives the belief that it is due to excess of males. True, of the Todas, we read that owing “to the great scarcity of women in this tribe, it more frequently happens that a single woman is wife to several husbands.” But against this may be set such a case as that of Tahiti, where we have no reason to believe that women were scarce, and where the polyandry that was associated with polygyny, went along with other loose sexual relations—where “brothers, or members of the same family, sometimes exchanged their

wives, while the wife of every individual was also the wife of his *tano* or friend ”

Nor can we, I think, ascribe it to poverty; though poverty may, in some cases, be the cause of its continuance and spread. We have direct evidence that it is general in some communities which are relatively well off; and further, that though in some cases distinctive of the poorer classes, it is in other cases the reverse. As above quoted, Tennent tells us that in Ceylon, polyandry prevails “chiefly among the wealthier classes”. implying that as, among the poorer classes each man has commonly one wife, if not more, the cause there is neither lack of women for wives, nor lack of ability to maintain wives

We must rather, I think, in pursuance of conclusions already drawn, regard polyandry as one of the types of marital relations emerging from the primitive unregulated state; and one which has survived where competing forms, not being favoured by the conditions, have failed to extinguish it.

§ 300. When from that form of polyandry, little above promiscuity, in which one wife has several unrelated husbands and each of the husbands has other unrelated wives, we pass to that form in which the unrelated husbands have but one wife, thence to the form in which the husbands are related, and finally to the form in which they are brothers only, we trace an advance in family structure. Already I have referred to Mr M'Lennan's indication of the different results.

Where, as among the Nairs, each woman has several unrelated husbands, and each of the husbands has several unrelated wives, not only is the paternal blood of the offspring unknown, but children of each man commonly exist in several households. Besides the fact that the only known kinship is through the woman, there is the fact that each man's domestic interest, not limited to a particular

group of children, is lost by dissipation. Maternal parenthood alone being concentrated and paternal parenthood diffused, the family bonds are but little stronger than those accompanying general promiscuity. Besides his mother, a man's only known relations are his half-brothers and half-sisters and the children of his half-sisters.

Where the unrelated husbands are limited to one wife, and where their children, though they cannot be affiliated upon their fathers individually, form a single domestic group, there is some sphere for the paternal feelings. Each husband has an interest in the offspring, some of whom may be, and probably are, his own: occasionally, indeed, being severally attributed to each by likeness, or by their mother's statement. Though the positively-known relationships remain the same as in the last case, yet there is some advance in the formation of domestic groups.

And then, as Mr McLennan points out, where the husbands are brothers, the children have a known blood in the male line as well as in the female line. Each boy or girl in the family is, if not a son or daughter, still a nephew or niece, of each husband. This fixing of the ancestry on both sides evidently strengthens the family bond. Beyond the closer kinships in each group, there now arise in successive generations, alliances between groups, not on the female side only, but on the male side. And this ramification of connexions becomes an element of social strength.*

So that as, in passing from promiscuity to polyandry, we

* It is proper to point out here that the name fraternal polyandry does not exactly represent the facts, and that in reality there exists no such institution. A polyandry strictly fraternal, would imply that the husbands had descended from a monogamic union, for only then could they be brothers in the full sense of the word. In a polyandric society the so-called brothers who become husbands of one wife, are descendants of one mother by fathers who were brothers on the maternal side, and something less than cousins on the paternal side. The so-called brothers are therefore something more than half-brothers. This qualification, however, does not negative the statement that the male blood of the children is known.

pass to more coherent and definite domestic relations, so do we in passing from the lower forms of polyandry to the higher.

§ 301. What must we say concerning polyandry in respect of its effects on social self-preservation, on the rearing of offspring, and on the lives of adults? Some who have had good opportunities of judging, contend that in certain places it is advantageous. It would seem that just as there are habitats in which only inferior forms of animals can exist, so in societies physically conditioned in particular ways, the inferior forms of domestic life survive because they alone are practicable.

In his recent work, *The Abode of Snow*, Mr. Wilson, discussing the Tibetan polyandry in its adaptation to the barren Himalayan region, says —

“There is a tendency on the part of population to increase at a greater ratio than its power of producing food, and few more effectual means to check that tendency could well be devised than the system of Tibetan polyandry, taken in conjunction with the Lama monasteries and nunneries. Very likely it was never deliberately devised to do so, and came down from some very rude state of society, but, at all events, it must have been found exceedingly serviceable in repressing population among, what Kœppen so well calls, the snow-lands of Asia. If population had increased there at the rate it has in England during this century, frightful results must have followed either to the Tibetans or to their immediate neighbours. As it is, almost every one in the Himalaya has either land and a house of his own, or land and a house in which he has a share, and which provide for his protection and subsistence * * * I was a little surprised to find that one of the Moravian missionaries defended the polyandry of the Tibetans, not as a thing to be approved of in the abstract or tolerated among Christians, but as good for the heathen of so sterile country. In taking this view, he proceeded on the argument that superabundant population, in an unfertile country, must be a great calamity, and produce ‘eternal warfare or eternal want.’ Turner took also a similar view.”

Concerning the effects on the welfare of offspring, I do not meet with definite statements. If, however, it be true that in so very infertile a habitat, a form of marriage

which tends to check increase is advantageous; the implication is that the children in each family are better off, physically considered, than they would be were monogamic unions the rule being better fed and clothed the mortality among them must be less, and the growth more vigorous. As to the accompanying mental influence, we can only suspect that conflict of authority and absence of specific pater-nity, must entail serious evils

The lives of adults, if we may accept the testimonies of travellers, do not appear to be so injuriously affected as might have been anticipated Mr Wilson says:—

“In a primitive and not very settled state of society, when the head of a family is often called away on long mercantile journeys, or to attend at court, or for purposes of war, it is a certain advantage that he should be able to leave a relative in his place whose interests are bound up with his own Mr Talboys Wheeler has suggested that polyandry arose among a pastoral people, whose men were away from their families for months at a time, and where the duty of protecting their families would be undertaken by the brothers in turn The system certainly answers such an end, and I never knew of a case where a polyandric wife was left without the society of one at least of her husbands”

He also quotes Turner as saying —

“The influence of this custom on the manners of the people, as far as I could trace, has not been unfavourable * * * To the privilege of unbounded liberty the wife here adds the character of mistress of the family and companion of her husbands But, lest so pleasing a picture may delude some of the strong-minded ladies (of America) to get up an agitation for the establishment of polyandry in the West, I must say it struck me that the having many husbands sometimes appeared to be only having many masters and increased toil and trouble”

So, too, in the lately-republished narrative of Mr. George Bogle’s mission to Tibet, in Warren Hastings’ time we read —

“They club together in matrimony as merchants do in trade Nor is this joint concern often productive of jealousy among the partners They are little addicted to jealousy Disputes, indeed, sometimes arise about the children of the marriage, but they are settled either by a comparison of the features of the child with those of its several fathers, or left to the determination of its mother”

§ 302. If we regard polyandry as one of several marital

arrangements independently originating in the earliest societies, we shall not interpret its decline in the same way as if we consider it a transitional form once passed through by every race, as Mr M'Lennan apparently does

To one of the causes which he assigns for its decline, we may, indeed, assent. He points out that in some cases, as among the Kandyans, a chief has a wife to himself, though inferior people are polyandrous; and we learn from Horace della Penna's account of Thibet, lately republished, that in his time a kindred difference existed there. He says that polyandry "seldom occurs with noble folk, or those in easy circumstances, who take one wife alone, and sometimes, but rarely, more." Hence, with Mr. M'Lennan, we may infer that since the habits of the higher in all societies spread downwards, imitation tends to make monogamy replace polyandry where circumstances do not hinder. But Mr. M'Lennan, not regarding this dying out of inferior forms in presence of superior forms as the sole cause, endeavours to show that the superior forms also arise by transformation of the inferior. Taking as typical the polyandry of Ladak, where the eldest brother has a priority, and where, on his death, "*his property, authority, and widow devolve upon his next brother,*" he affiliates upon this the arrangement among the early Hebrews, under which "the Levir had no alternative but to take the widow [of his brother]; *indeed, she was his wife without any form of marriage*" And he hence infers that monogamy and polygyny, as existing among the Hebrews, had been preceded by polyandry saying that—

"It is impossible not to believe that we have here presented to us successive stages of decay of one and the same original institution, impossible not to connect the obligation, in its several phases, with what we have seen prevailing in Ladak, impossible not to regard it as having originally been a right of succession, or the counterpart of such a right, derived from the practice of polyandry."

It seems to me, however, quite possible to find in the customs of primitive peoples, another explanation which is much more natural. Under early social systems, wives,

being regarded as property, are inherited in the same way as other property. When we read that among the "Bellabollahs (Haidahs), the widow of the deceased is transferred to his brother's harem," that among the Zulus, "the widow is transferred to the brother of her deceased husband on his death;" that among the Damaras, "when a chief dies, his surviving wives are transferred to his brother or to *his nearest relation*," the suspicion is raised that this taking possession of a brother's wife has nothing to do with polyandry. This suspicion is confirmed on finding that in Congo "if there be three brothers, and one of them die, the two survivors share his concubines between them;" on finding that in Samoa, "the brother of a deceased husband, considered himself *entitled* to have his brother's wife," on finding that in ancient Vera Paz, "the brother of the deceased at once took her [the widow] as his wife even if he was married, and if he did not, *another relation had a right to her*." These facts imply that where wives are classed simply as objects of value (usually purchased) the succession to them by brothers goes along with succession in general. And if there needs further evidence, I may cite this—that in sundry places a father's wives are inherited Thomson says that among the New Zealanders "father's wives descended to their sons, and dead brothers' wives to their surviving brothers." Of the Mishmis, Rowlatt states that "when a man dies or becomes old, it is the custom of these people for the wives to be distributed amongst his sons, who take them to wife" Torquemada mentions provinces of Mexico in which the sons inherited those wives of their fathers who had not yet borne sons to the deceased. In his *Abeokuta*, Burton states that among the Egbas "the son inherits all the father's wives save his own mother" We learn from Bosman that on the Slave Coast, "upon the father's death, the eldest son inherits not only all his goods and cattle, but his wives * * * except his own mother." And in Dahomey, the king's eldest son

"inherits the deceased's wives and makes them his own, excepting, of course, the woman that bare him."

We cannot, then, admit that the practice of marrying a dead brother's widow implies pre-existence of polyandry ; and cannot accept the inference that out of decaying polyandry higher forms of marriage grew up.

§ 303 Considering the several forms of polyandry as types of domestic relations which have arisen by successive limitations of promiscuity, we must say that in this or that society they have evolved, have survived, or have been extinguished, according as the aggregate of conditions has determined. Probably in some cases the lower polyandry has not been supplanted by the higher, because the two have not so come into competition that the better results of the higher have made themselves felt. In competition with polygyny and monogamy, polyandry may, in some cases, have had the advantage for reasons above cited polygynic and monogamic families dying out because the offspring of them were relatively ill-fed

On the other hand, influences like those which in some places made the superior forms of polyandry prevail over the inferior, must, in other places, have tended to extinguish polyandry altogether. Save where great restriction of the food supply over a considerable area, rendered multiplication disadvantageous, polyandric societies, producing fewer members available for offence and defence, naturally gave way before societies having family arrangements more favourable to increase. This is probably the chief reason why polyandry, once common, has become comparatively infrequent. Other things equal, this inferior family type has yielded to superior family types, both because of its inferior fertility, and because of the smaller family cohesion, and consequently smaller social cohesion, resulting from it.

CHAPTER VII.

POLYGyny.

§ 304. WERE it not for the ideas of sacredness associated with that Hebrew history which in childhood familiarized us with examples of polygyny, we should probably feel as much surprise and repugnance on first reading about it as we do on first reading about polyandry. Education has, however, prepared us for learning without astonishment that polygyny is common in every part of the world not occupied by the most advanced nations

It prevails in all climates—in the Arctic regions, in arid burning tracts, in fertile oceanic islands, in steaming tropical continents. All races practise it We have already noted its occurrence among the lowest tribes of men—the Fuegians, the Australians, the Tasmanians. It is habitual with the Negritos in New Caledonia, in Tanna, in Vate, in Eromanga, in Lifu Malayo-Polynesian peoples exhibit it everywhere in Tahiti, in the Sandwich Islands, Tonga, New Zealand, Madagascar, Sumatra. Throughout America it is found among the rude tribes of the northern continent, from the Esquimaux to the Mosquitos of the isthmus; and among the equally rude tribes of the southern continent, from the Caribs to the Patagonians, and it prevailed in the ancient semi-civilized American states of Mexico, Peru, and Central America. It is general with African peoples—with the Hottentots, Damaras, Kaffirs of

the south; with the East Africans, Congo people, Coast Negroes, Inland Negroes, Dahomans, Ashantis of mid-Africa, with the Fulahs and Abyssinians of the north. In Asia it is common to the settled Cingalese, the semi-nomadic Hill-tribes of India, the wandering Yakutes. And its prevalence in ancient eastern societies needs but naming. Indeed, on counting up all peoples, savage and civilized, past and present, it appears that the polygynous ones far outnumber the rest.

Plurality of wives would be even more general were it not in some cases checked by the conditions. We learn this when told that among the poverty-stricken Bushmen, polygyny, though perfectly allowable, is rare; when Forsyth states that among the Gonds "polygamy is not forbidden, but, women being costly chattels, it is rarely practised," when Tennent tells us of the Veddahs that "the community is too poor to afford polygamy," when, concerning the Ostyaks, we read in Latham that "polygamy is allowed, but it is not common for a plurality of wives the country is too poor." And though the occurrence of polygyny among some of the poorest peoples, as the Australians and the Fuegians, shows that poverty does not prevent it if the women can gather enough food for self-maintenance, we may yet understand its exclusion where the mode of life does not permit them to do this.

This natural restriction of polygyny by poverty, is not the only natural restriction. There is another, recognition of which modifies considerably those ideas of polygynous societies ordinarily conveyed by travellers. Their accounts often imply that plurality of wives is, if not the uniform, still, the most general, arrangement in the societies they describe. Yet a little thought makes us hesitate to accept the implication. Turner tells us that in Lifu, "a chief has forty wives. common men three or four." How can that be? we may fitly ask—How come there to be so many women? Scepticism such as is raised by this state-

that "obliged to make frequent journeys, a Yakout has a wife in every place where he stops." Bancroft quotes concerning the Haidahs, the assertion that "polygamy is universal, regulated simply by the facilities for subsistence." Acceptance of these statements involves the belief that in each case there is a great numerical preponderance of women over men. But unless we assume that the number of girls born greatly exceeds the number of boys, which we have no warrant for doing, or else that war causes a mortality of males more enormous than seems credible, we must suspect that the polygynous arrangement is less general than these expressions represent it to be. Examination confirms the suspicion. For habitually we find it said, or implied, that the number of wives varies according to the means a man has of purchasing or maintaining them; whence it is to be inferred that as, in all societies, the majority are comparatively poor, only the minority can afford more wives than one. Such statements as that among the Comanches "every man may have all the wives he can buy," that the Nuffi people "marry as many wives as they are able to purchase;" that "the number of a Feegeean's wives is limited only by his means of maintaining them," that "want of means forms the only limit to the number of wives of a Mishmee;" warrant the inference that the less prosperous men, everywhere likely to form the larger part, have either no wives or but a single wife each, and that thus there does not really exist that immense excess of women implied by such statements as those above quoted.

quiring further. Numerous accounts show us, directly and indirectly, that in polygynous societies the polygyny prevails only among the wealthier or the higher in rank. Lichtenstein says "most of the Koossas have but one wife, the kings and chiefs of the kraals only, have four or five." Raffles states that polygyny is permitted in Java, but not much practised except by the upper classes. "The customs of the Sumatrans," says Marsden, "permit their having as many wives by *jujur* as they can compass the purchase of, or afford to maintain; but it is extremely rare that an instance occurs of their having more than one, and that only among a few of the chiefs." Of the Ancient Mexicans, Francis of Bologna writes—"The people were content with one legitimate wife, except the lords, who had many concubines, some possessing more than 800." Herrera alleges of the Honduras people that "they generally kept but one wife, but their lords as many as they pleased." And among the people of Nicaragua, according to Oviedo, "few have more than one wife, except the principal men, and those who can support more."

These statements, joined with others presently to be cited, warn us against the erroneous impressions likely to be formed of societies described as polygynous. We may infer that in most cases where polygyny exists, monogamy co-exists to a greater extent, and in all other cases to a considerable extent.

§ 305 The prevalence of polygyny will not perplex us if, setting out with the primitive unregulated state, we ask what naturally happened.

The superior strength of body and energy of mind, which gained certain men predominance as warriors and chiefs, also gave them more power of securing women; either by stealing them from other tribes or by wresting them from men of their own tribe. And in the same way that possession of a stolen wife came to be regarded as a

mark of superiority, so did possession of several wives, foreign or native. Cremony, as quoted by Bancroft, says the Apache "who can support or keep, or attract by his power to keep, the greatest number of women, is the man who is deemed entitled to the greatest amount of honour and respect" This is typical. Plurality of wives has everywhere tended to become a more or less definite class-distinction We learn from Clavigero that in Mexico "Ahuizotl's predecessors had many wives, from an opinion that their authority and grandeur would be heightened in proportion to the number of persons who contributed to their pleasures." Ellis states that in Madagascar, where a plurality of wives is common among chiefs and rich people, "the only law to regulate polygamy seems to be, that no man may take twelve wives excepting the sovereign." Describing the East Africans, Burton says—"The chiefs pride themselves upon the number of their wives, varying from twelve to three hundred" According to Beecham, in Ashantee "the number of wives which caboceers and other persons possess, depends partly on their rank and partly on their ability to purchase them" Joining which facts with those furnished to us by the Hebrews, whose judges and kings—Gideon, David, Solomon—had their greatness so shown; and with those furnished us by extant Eastern peoples, whose potentates, primary and secondary, are thus distinguished, we may see that the establishment and maintenance of polygyny has been largely due to the honour accorded to it, originally as a mark of strength and bravery, and afterwards as a mark of social *status*. This conclusion is verified by European history, as witness the statement of Tacitus concerning the ancient Germans, that "almost alone among barbarians they are content with one wife," except a very few of noble birth, and as witness the statement of Montesquieu that the polygyny of the Merovingian kings was an attribute of dignity.

From the beginning, too, except in some regions where

the labour of women could not be utilized for purposes of production, an economic incentive has joined with other incentives. We read that in New Caledonia, "chiefs have ten, twenty, and thirty wives. The more wives the better plantations, and the more food" A like utilization of wives prompts to a plurality of them throughout Africa. On reading in Caillé that Mandingo wives "go to distant places for wood and water, their husbands make them sow, weed the cultivated fields, and gather in the harvest;" and on being told by Shooter that among the Kaffirs, "besides her domestic duties, the woman has to perform all the hard work; she is her husband's ox, as a Kaffir once said to me, —she had been bought, he argued, and must therefore labour;" we cannot fail to see that one motive for desiring many wives, is desiring many slaves.

When we remember that in every society the doings of the powerful and the wealthy furnish the standards of right and wrong, so that even the very words "noble" and "servile," originally expressive of social *status*, have come to be expressive of good and bad in conduct; we may understand how it happens that plurality of wives acquires, in places where it prevails, an ethical sanction. Associated with greatness, polygyny is thought praiseworthy; and associated with poverty, monogamy is thought mean. Hence the reprobation with which, as we have already seen, the one-wife system is regarded in polygynous communities. Even the religious sanction is sometimes joined with the ethical sanction. Keating tells us that by the Chippewayans "polygamy is held to be agreeable in the eyes of the Great Spirit, as he that has most children is held in highest estimation"—a belief reminding us of a kindred one current among the Mormons. And that among the Hebrews plurality of wives was not at variance either with the prevailing moral sentiments or with supposed divine injunctions, is proved by the absence of any direct or implied reprobation of it in their laws, and by the special favour said to be

shown by God to sundry rulers who had many wives and many concubines

It should be added that in societies characterized by it, this form of marital relation is approved by women as well as men—certainly in some cases, if not generally. Bancroft cites the fact that among the Comanches “as polygamy causes a greater division of labor, the women do not object to it.” And of the Makalolo women, Livingstone says —

“On hearing that a man in England could marry but one wife, several ladies exclaimed that they would not like to live in such a country : they could not imagine how English ladies could relish our custom , for in their way of thinking, every man of respectability should have a number of wives as a proof of his wealth . Similar ideas prevail all down the Zambesi ”

Initiated, then, by unrestrained sexual instincts among savage men, polygyny has very generally been fostered by the same causes that have established political control and industrial control. It has commonly been an incidental element of governmental power in uncivilized and semi-civilized societies.

§ 306. In contrast with the types of marital relations dealt with in the two preceding chapters, polygyny shows us some advance . That it is better than promiscuity needs no proof ; and that it is better than polyandry we shall find several reasons for concluding.

Under it there arise more definite relationships. Where the unions of the sexes are of the lowest kinds, only the maternal blood is known. On passing from the ruder form of polyandry in which the husbands are unrelated, to that higher form in which the husbands are something more than half-brothers, we reach a stage in which the father's blood is known, though not with certainty the father. But in polygyny, fatherhood and motherhood are both manifest. In so far, then, as paternal feeling is fostered by more distinct consciousness of paternity, the connexion between parents and children is strengthened : the bond becomes a

double one. A further result is that definite lines of descent on the male side, from generation to generation, are established. Hence greater family cohesion. Beyond definite union of father and son, there is definite union of successive fathers and sons in a series.

But while increased in a descending direction, family cohesion is little, if at all, increased in a lateral direction. Though some of the children may be brothers and sisters, most of them are only half-brothers and half-sisters, and their fraternal feeling is possibly less than in the polyandric household. In a group descended from several unrelated mothers by the same father, the jealousies fostered by the mothers are likely to be greater than in a group descended from the same mother and indefinitely affiliated on several brothers. In this respect, then, the family remains equally incoherent, or becomes, perhaps, more incoherent. Probably to this cause is due much of the dissension and plotting and bloodshed among the sons of eastern rulers.

Save, however, where there result among sons struggles for power, we may conclude that by definiteness of descent the family is made more coherent, admits of more extensive ramifications, and is thus of higher type.

§ 307. The effects of polygyny on the self-preservation of the society, on the welfare of offspring, and on the lives of adults, have next to be considered.

Barbarous communities surrounded by communities at enmity with them, derive advantages from it. Lichtenstein remarks of the Kaffirs that "there are fewer men than women, on account of the numbers of the former that fall in their frequent wars. Thence comes polygamy, and the women being principally employed in all menial occupations." Now, without accepting the inference that polygyny arises from the loss of men in war, or that the servile condition of women is due to it, we may recognize the fact which Lichtenstein does not name, that where the death-rate

of males considerably exceeds that of females, plurality of wives becomes a means of maintaining population. If while decimation of the men is habitually going on, no survivor has more than one wife—if, consequently, many women remain without husbands; there will be a deficiency of children the multiplication will not suffice to make up for the mortality. Food being sufficient, and other things equal, it will result that of two conflicting peoples, the one which does not utilize all its women as mothers, will be unable to hold its ground against the other which does thus utilize them: the monogamous will disappear before the polygynous. Hence, probably, a chief reason why in rude societies and little-developed societies, where all men being warriors many fall in wars, polygyny prevails so widely.

Another way in which, under early conditions, polygyny conduces to social self-preservation, is this. In a barbarous community formed of some wifeless men, others who have one wife each, and others who have more than one, it must on the average happen that this last class will be the relatively superior—the stronger and more courageous among savages, and among semi-civilized peoples the wealthier also, who are mostly the more capable. Hence, ordinarily, a greater number of offspring will be left by men having natures of the kind needed. The society will be rendered by polygyny not only numerically stronger, but more of its units will be efficient warriors.

There is also a resulting structural advance. As compared with lower types of the family, polygyny, by establishment of descent in the male line, conduces to political stability. It is true that in many polygynous societies succession of rulers is in the female line (the savage system of kinship having survived), and here the advantage is not achieved. This may be a reason why in Africa, where this law of descent is common, social consolidation is so incomplete; kingdoms being from time to time formed and after brief periods dissolved again, as we before saw. But under

polygyny, inheritance of power by sons becomes possible; and where it arises, government is better maintained. Not indeed that it is well maintained, for when we read that among the Damaras "the eldest son of the chief's favourite wife succeeds his father;" and that among the Koossa Kaffirs, the king's son who succeeds is "not always the eldest; it is commonly him whose mother was of the richest and oldest family of any of the king's wives;" we are shown how polygyny introduces an element of uncertainty in the succession of rulers, which is adverse to stable government.

Further, this definite descent in the male line aids the development of ancestor-worship, and so serves in another way to consolidate society. With subordination to the living there is joined subordination to the dead. Rules, prohibitions, commands, derived from leading men of the past, acquire sacred sanctions, and, as all early civilizations show us, the resulting cult helps to maintain order and increase the efficiency of the offensive and defensive organization.

On the rearing of offspring, the effects, in regions where food is scarce, are probably not better than, if as good as, those of polyandry, but in warm and productive regions the death-rate of offspring from innutrition is not likely to be higher, and the establishment of positive paternity conduces to protection of them. In some cases, indeed, polygyny tends directly to diminish the mortality of children: those cases, namely, in which a man is allowed, or is called upon, to marry the widow of his brother and adopt his family. For what we have seen to be originally a right, becomes, in many cases, an obligation. Even among inferior races, as the Chippewas, who require a man to marry his dead brother's wife, an ostensible reason is that he has to provide for his brother's children. And on reading that polygyny is not common with the Ostyaks because "the country is too poor," but that "brothers marry the widows of brothers," we may infer that the mortality of children is, under such conditions, thereby diminished. Very possibly

the Hebrew requirement that a man should raise up seed to his dead brother, may have originally been that he should rear his dead brother's children, though it was afterwards otherwise interpreted, for the demand was made on the surviving brother by the widow, who spat in his face before the elders if he refused. The suspicion that obligation to take care of fatherless nephews and nieces, became a cause for maintaining this form of polygyny, is confirmed by current facts; as witness the following passage in Lady Duff Gordon's *Letters from Egypt*.—"I met Hassan, the janissary of the American Consulate, a very respectable good man. He told me he had married another wife since last year. I asked, What for? It was the widow of his brother, who had always lived in the same house with him, like one family, and who died, leaving two boys. She is neither young nor handsome, but he considered it his duty to provide for her and the children, and not let her marry a stranger"

Though in most rude societies polygyny may not be unfavourable to the rearing of children, and may occasionally check juvenile mortality in societies where philanthropic feeling is undeveloped, yet its moral effects on children can scarcely be better than those of still lower marital relations. Where there is but one household, dissensions caused by differences of origin and interest, must be injurious to character. And even where, as happens in many places, the mothers have separate households, there cannot be escaped the evils of jealousies between the groups; and there still remain the evils caused by a too-diffused paternal care.

On the lives of adults in undeveloped societies, the effects of polygyny are not in all respects bad. Where the habitat is such that women are unable to support themselves, while the number of men is deficient, it results that, if there is no polygyny, some of them, remaining uncared for, lead miserable lives. The Esquimaux furnish an illustration. Adequate food and clothing being under their conditions

obtainable only by men, it happens that widows, when not taken by surviving men as additional wives, soon die of starvation. Even where food is not difficult to procure, if there is much mortality of males in war, there must, in the absence of polygyny, be many women without that protection which, under primitive conditions, is indispensable. Certain ills to which adult females of rude societies are inevitably exposed, are thus mitigated by polygyny—mitigated in the only way practicable among unsympathetic barbarians.

Of course the evils entailed, especially on women, are great. In Madagascar the name for polygyny — “fampovafesana” — signifies “the means of causing enmity,” and that kindred names are commonly applicable to it, we are shown by their use among the Hebrews in the Mishna, a man’s several wives are called “tzarôt,” that is, troubles, adversaries, or rivals. Very generally the dissension is mitigated by separation. Marsden says of the Battas in Sumatra that “the husband finds it necessary to allot to each of them [his wives] their several fire-places and cooking utensils, where they dress their own victuals separately, and prepare his in turns.” Speaking of the wives of a Mishmi chief, Wilcox says — “The remainder, to avoid domestic quarrels, have separate houses assigned them at some little distance, or live with their relations.” Throughout Africa there is usually a like arrangement. But obviously the moral mischiefs are thus only in a small degree diminished. Moreover, though it may not absolutely exclude, still, it greatly represses, the higher emotions fostered by the connexions of the sexes. Prompted by the instincts of men and disregarding the preferences of women, polygyny can but in exceptional cases, and then in only slight degrees, permit of better relations than exist among animals. Associated as it is with the conception of women as property, to be sold by fathers, bought by husbands, and afterwards treated as slaves, there are negatived those sentiments towards

them into which sympathy and respect enter as necessary elements. How profoundly the lives of adults are thus vitiated, may be inferred from the characterization which Monteiro gives of the polygynous peoples of Africa

“The negro knows not love, affection, or jealousy * * * In all the long years I have been in Africa I have never seen a negro manifest the least tenderness for or to a negress * * * I have never seen a negro put his arm round a woman’s waist, or give or receive any caress whatever that would indicate the slightest loving regard or affection on either side. They have no words or expressions in their language indicative of affection or love.”

And this testimony harmonizes with testimonies cited by Sir John Lubbock, to the effect that the Hottentots “are so cold and indifferent to one another that you would think there was no such thing as love between them,” that among the Koussa Kaffirs, there is “no feeling of love in marriage;” and that in Yariba, “a man thinks as little of taking a wife as of cutting an ear of corn—affection is altogether out of the question.” Not, indeed, that we can regard polygyny as *causing* this absence of the tender emotion associated among ourselves with the relations of the sexes; for lack of it habitually characterizes men of low types, whether they have only one wife each or have several. We can say merely that the practice of polygyny is unfavourable to development of the emotion.

It need scarcely be added that beyond this resulting inferiority in the adult life, there is an abridgment of the life which remains after the reproductive age is passed. Naturally the women, already little regarded, then become utterly unregarded; and the men, if in a less degree, also suffer from lack of the aid prompted by domestic affection. Hence an early close to a miserable old age

§ 308 A few words must be added respecting the modifications which polygyny undergoes in progressing societies, and which accompany the spread of monogamy.

Between the two or more wives which the stronger man

among savages secures to himself, there are no distinctions save such as are caused by his caprice, but distinctions afterwards arise. Here he has an older and a younger wife, like the Australian, and occasionally the Bushman. Here he has wives purchased at intervals, of which he makes one or other a favourite; as does the Damara or the Fijian. Here of the several married by him the earliest only is considered a legitimate wife, as with the Tahitians of rank or the Chibchas. And here the chief wife is one who has been given by the king. Naturally from the beginning the tendency has been to establish differences among them, and for the differentiations to grow in course of time definite.

Then there comes also the contrast between wives who are native women, and wives who are women taken as spoils of war. Hence, probably, the original way in which results the marking off into wives proper and concubines—a way which is indicated even among the Hebrews; who, in Deuteronomy *xxi* 10—14, are authorized to appropriate individually the women of conquered enemies—women who, as they may be repudiated at pleasure without formal divorce, stand in the position of concubines rather than wives. Once made, a difference of this kind extended itself by recognizing the ranks from which the women married were derived—wives from the superior class; concubines from the inferior; some exempt from labour, some slaves.

And then, from the tendency towards inequality of position among the wives, there at length came in advancing societies the recognized arrangement of a chief wife; and eventually, with rulers, a queen, whose children were the legitimate successors.

Along with the spread of monogamy in ways to be hereafter described, the decay of polygyny may be regarded as in part produced by this modification which more and more elevated one of the wives, and reduced the rest to a relatively servile condition, passing gradually into a condition less and less authorized. Stages in this transformation

were exhibited among the Persians, whose kings, besides concubines, had three or four wives, one of whom was queen, "regarded as wife in a different sense from the others", and again among the Assyrians, whose kings had each one wife only, with a certain number of concubines; and again among the Egyptians, whose wall-paintings represent the king with his legitimate wife seated by his side, and his illegitimate wives dancing for their amusement. It was so, too, with the ancient Peruvian rulers and Chibcha rulers, as it is still with the rulers of Abyssinia.

Naturally the polygynic arrangement as it decayed, continued longest in connexion with the governing organization, which everywhere and always displays a more archaic condition than other parts of social organization. Recognizing which truth we shall not be surprised by the fact that polygyny, in its more or less modified forms, survived among monarchs during the earlier stages of European civilization. As naphed above, it was practised by Merovingian kings Clothair and his sons furnishing instances. And after being gradually repressed by the Church throughout other ranks, this plurality of wives or concubines long survived in the royal usage of having many mistresses, avowed and unavowed polygyny in this qualified form remaining a tolerated privilege of royalty down to quite late times.

§ 309. To sum up, we must say, firstly, that in degree of evolution the polygynous type of family is higher than the types we have thus far considered. Its connexions are equally definite in a lateral direction and more definite in a descending direction. There is greater filial and parental cohesion, caused by conscious unity of blood on both male and female sides; and the continuity of this cohesion through successive generations, makes possible a more extensive family integration.

Under most conditions polygyny has prevailed against promiscuity and polyandry, because it has subserved social

needs better. It has done this by adding to other causes of social cohesion, more widely ramifying family connexions. It has done it by furthering that political stability which results from established succession of rulers in the same family. It has done it by making possible a more developed form of ancestor-worship.

While it has spread widely by supplanting inferior types of the marital relations, it has, in the majority of cases, held its ground against the superior type, because, under rude conditions, it conduces in a higher degree to social self-preservation: making possible more rapid replacement of men lost in war, and so increasing the chance of social survival.

But while it has this adaptation to certain low stages of social evolution—while in some cases it diminishes juvenile mortality and serves also to diminish the mortality of surplus women; it repeats within the household the barbarism characterizing the life outside the household.

CHAPTER VIII.

MONOGAMY.*

§ 310. ALREADY reasons have been given for believing that monogamy dates back as far as any other marital relation. Given a state preceding all social arrangements, and unions of individual men with individual women must have arisen among other kinds of unions

Indeed, certain modes of life necessitating wide dispersion, such as are pursued by the lowest forest tribes in Brazil and the interior of Borneo—modes of life which in earlier stages of human evolution must have been commoner than now—hinder other relations of the sexes. The Wood-Veddahs illustrate for us the connexion between monogamy and great scattering; and, again, the Bushmen, who, having no interdict on polygyny are yet rarely polygynous, show us how separation into very small groups in pursuit of food, tends to produce more or less enduring associations between men and women in pairs. Where the habitat permits larger groups, the unregulated relations of the sexes are qualified by rudimentary monogamic unions

* Now that the name polyandry has become current, it is needful to use polygyny as a name for the converse arrangement, and at first it would seem that polygyny implies monogyny as its proper correlative. But monogyny does not fully express the union of one man with one woman, in contradistinction to the unions of one woman with many men and one man with many women, since the feminine unity is alone indicated by it—not the masculine unity also. Hence monogamy, expressing the singleness of the marriage, may be fitly retained.

as early as by unions of the polyandric and polygynic kinds, if not earlier. The tendency everywhere shown among the lowest races for men to take possession of women by force, has this implication; since the monopoly established by each act of violence is over one woman, not over several. Always the state of having two wives must be preceded by the state of having one. And the state of having one must in many cases continue, because of the difficulty of getting two where the surplus of women is not great.

Of course the union of one man with one woman as it originally exists, shows us but the beginning of monogamic marriage as understood by us. Where, as in cases already given, the wills of the stronger alone initiate and maintain such unions—where, as among the Hudson's Bay Indians, according to Hearne (quoted by Sir John Lubbock)—“a weak man, unless he be a good hunter and well beloved, is seldom permitted to keep a wife that a stronger man thinks worth his notice”—where, as among the Copper Indians, Richardson “more than once saw a stronger man assert his right to take the wife of a weaker countryman;” monogamy is very unstable. Its instability thus caused by external actions is made greater by internal actions—by the disruptive forces of unrestrained impulses. When, even in a superior race like the Semitic, we find wives repudiated with extreme frequency, so that among some tribes of Bedouins, according to Burckhardt, a man will have as many as fifty in succession, we may infer that by slow stages only have enduring monogamic unions been established.

§ 311. There have been several aids to the establishment of them. An important one has been a more developed conception of property, with consequent usages of barter and purchase. The wresting of women from one another by the men of a tribe, always checked to some extent by the accompanying danger, was further checked when wives came to be bought, or earned by labour. If he had given to her

father a price, or a stipulated length of service, a man would resist with greater determination the abstraction of his wife, than if he had obtained her without this sacrifice, and from other men of the tribe who had similarly bought their wives, naturally siding with him, would come reprobation of one who disregarded his claim. From the same cause arises a restraint on divorce. If a wife has been bought or long laboured for, and if another wife can be had only at like cost, a barrier is raised against desires tending to dissolve the marriage.

Then, too, in higher stages, predominance of this higher form of the marital relation is favoured by progressive equalization of the sexes in numbers. In proportion as war becomes less frequent, and in proportion as an increasing part of the male population is occupied in industry, the mortality of males diminishes, and the spread of monogamy is furthered. For polygyny now meets with positive resistance. Where there is an approximate balance of men and women, plurality of wives cannot prevail widely without leaving many men wifeless, and from them must come a public opinion adverse to polygyny, tending to restrain and diminish it. That public opinion thus acts even on rulers after a certain stage, is shown us by Low's remark concerning the rarity of polygyny among the Land Dyaks "chiefs sometimes indulge in it, but they are apt to lose their influence over their followers by so doing."

To these negative causes for the spread of monogamy during social evolution, have to be added positive causes. But before turning to them we must contrast the monogamic type of family with the types already treated.

§ 312. Evidently, as tested by the definiteness and strength of the links among its members, the monogamic family is the most evolved. In polyandry the maternal connexion is alone distinct, and the children are but partially related to one another. In polygyny both the maternal and

paternal connexions are distinct, but while some of the children are fully related, others are related on the paternal side only. In monogamy not only are the maternal and paternal connexions both distinct, but all the children are related on both sides. The family cluster is thus held together by more numerous ties ; and beyond the greater cohesion so caused, there is an absence of that incohesion caused by the jealousies inevitable in the polygynic family.

This greater integration continues to characterize the family as it ramifies through successive generations. Definiteness of descent from the same father, grand-father, great grand-father, etc., it has in common with polygyny ; but it has also definiteness of descent from the same mother, grand-mother, great grand-mother, etc. Hence its diverging branches are joined by additional bonds. Where, as with the Romans, there is a legally-recognized descent in the male line only, so that out of the *cognates* constituting the whole body of descendants only the *agnates* are held to be definitely related, the ramifying family stock is incompletely held together, but where, as among ourselves, descendants of female members of the family are included, it is completely held together.

§ 313. How the interests of the society, of the offspring, and of the parents, are severally better subserved by monogamy during those later stages of social evolution characterized by it, needs pointing out only for form's sake.

Though, while habitual war and mortality of males leaves constantly a large surplus of females, polygyny favours maintenance of population, yet, when the surplus of females ceases to be large, monogamy becomes superior in productiveness. For, taking the number of females as measuring the possible number of children to be born in each generation, it cannot be doubted that more children are likely to be born if each man has a wife, than if some men have many wives while others have none. So that after pass-

ing a certain point in the decrease of male mortality, the monogamic society begins to have an advantage over the polygynic in respect of fertility, and social survival, in so far as it depends on multiplication, is aided by monogamy.

The stronger and more widely ramified family-bonds indicated above, aid in binding the monogamic society together more closely than any other. The multiplied relationships traced along both lines of descent in all families, which, intermarrying, are ever initiating other double sets of relationships, produce an intimate net-work of connexions increasing the social cohesion otherwise caused

Political stability is also furthered in a greater degree. Polygyny shares with monogamy the advantage that inheritance of power in the male line becomes possible, but under polygyny the advantage is partially destroyed by the competition for power liable to arise between the children of different mothers. In monogamy this element of dissension disappears, and settled rule is less frequently endangered.

For kindred reasons ancestor-worship has its development aided. Whatever favours stability in the dynasties of early rulers, tends to establish permanent dynasties of deities, with the resulting sacred sanctions for codes of conduct.

A decreased mortality of offspring is fairly inferable as a result of monogamy in societies that have outgrown barbarism. As already admitted, it may be that in a barren region like the snow lands of Asia, the children of a polyandric household, fed and protected by several men, may be better off than those of a monogamic household. It may be, too, that among savages whose slave-wives, brutally treated, have their strength overtaxed, as well as among such more advanced peoples as those of Africa, where the women do the field-work as well as the domestic drudgeries, a wife who is one of several is better able to rear her children than a wife who has no one to share the multifarious labours with her. But as fast as we rise to

social stages in which the men, no longer often away in war and idling during peace, are more and more of them occupied in industry—as fast as the women, less taxed by work, are able to pay greater attention to their families, while the men become the bread-winners; the monogamic union subserves better the rearing of children. Beyond the benefit of constant maternal care, the children get the benefit of concentrated paternal interest. Hence the society comes to be maintained at a smaller cost of juvenile mortality.

Still greater are the beneficial effects on the lives of adults, physical and moral. Though in primitive societies monogamic unions do not beget any higher feelings towards women, or any ameliorations of their lot; yet in later societies they are the necessary concomitants of such higher feelings and such ameliorations. Especially as the system of purchase declines and choice by women becomes a factor, there evolve the sentiments which characterize the relations of the sexes in civilized societies. These sentiments have far wider effects than at first appear. How by their influence on the domestic relations they directly tend to raise the quality of adult life, materially and mentally, is obvious. But they tend in no small degree indirectly to raise the quality of adult life by giving a permanent and deep source of æsthetic interest. On recalling the many and keen pleasures derived from music, poetry, fiction, the drama, etc.; and on remembering that their predominant theme is the passion of love; we shall see that to monogamy, which has developed this passion, we owe a large part of the gratifications which fill our leisure hours.

Nor must we forget, as a further result of the monogamic relation, that in a high degree it furthers preservation of life after the reproductive period is passed. Both by the prolonged marital affection which it fosters, and by the greater filial affection evoked under it, declining years are lengthened and their evils mitigated.

§ 314. May we, in concluding the discussions occupying this and preceding chapters, say that monogamy is the natural form of sexual relation for the human race? And if so, how happens it that during the earlier stages of human progress the relations of the sexes have been so indeterminate?

Among inferior creatures, inherited instinct settles the fit arrangement—the arrangement most conducive to the welfare of the species. Here there is no continuous association of male and female; here there is a polygynous group; here there is monogamy lasting for a season. A good deal of evidence may be given that among the primates inferior to man, there are monogamic relations of the sexes having some persistence. Why, then, in groups of primitive men did there come divergences from this arrangement prompted by innate tendencies? Possibly the answer is that with association into larger groups than are formed by inferior primates, there came into play disrupting influences which did not previously exist, and that the effects of these were not checked because the marital forms resulting furthered the survival of the groups. It would seem that during certain transitional stages between the first extremely scattered, or little gregarious, stage, and the extremely aggregated, or highly gregarious, stage there have arisen various conditions favouring various forms of union, so causing temporary deviations from the primitive tendency.

Be this as it may, however, it is manifest that monogamy has long been growing innate in the civilized man. All the ideas and sentiments that have become associated with marriage, having, as their necessary implication, the singleness of the union.

APPENDICES.

APPENDIX A.

NOTES TO PART I

[To avoid over-burdening the text with illustrations—even now, perhaps, too numerous—I suppressed many that I might have added some because they seemed superfluous; some because they were too long. Partly to give the more striking of these, I make this Appendix, but chiefly to add evidence which has since come to light, verifying certain of the conclusions not adequately supported.]

Primitive Credulity.—In the genesis of superstitions, a factor difficult to appreciate sufficiently is the unquestioning faith with which statements are accepted. A case or two may here be given for the purpose of displaying the mental nature which fosters absurd beliefs and gives currency to the most grotesque traditions.

Of the Coast Negroes, Winterbottom says (vol. 1, p. 255)—

“So strongly are they persuaded of the efficacy of these means of protection [amulets, etc.], that an African, a man of very superior mind, offered to allow a friend of mine, whose accuracy he had just been praising, to fire at him with a pistol, charged with ball.”

Laird and Oldfield tell us of the Inland Negroes (vol. II., p. 10), that a Nuffi woman

“imagined that she possessed a *maghony* (charm), which rendered her invulnerable to all edged tools and cutting instruments. So positive and convinced was she of the efficacy of her charm, that she voluntarily assented to hold her leg while some person should strike it with an axe. The king (or chief) of her town, on hearing this, determined to try the power of her charm, and desired the man to take an axe, and see whether this wonderful *maghony* would protect her from its effects * * * Her leg was laid upon a block, and a powerful blow given below the knee * * * To the poor woman's great horror and the terror of all present, her leg flew to the other side of the room.”

To this absoluteness of faith in dogmas impressed by seniors during early life, must be ascribed the readiness with which attendants, wives, and even friends, kill themselves at a funeral that they may join the deceased in the other world. The instance named by Bancroft (vol. 1., p. 288) of the Walla Walla chieftain who “caused himself to be buried alive in the grave with the last of his five sons,” reminding us of the Fijians and Tannese who go to their voluntary deaths so cheerfully, shows in an extreme degree this mental trait which makes monstrous creeds possible.

Natural Illusions—In § 53 I argued that these probably aid in

strengthening those conceptions of things which the primitive man forms. How they thus play a part, is shown by the following passage from Vamberg's *Sketches of Central Asia*, pp. 72, 73.

"As we were crossing the high plateau of Kaffan Kir, which forms part of Ustyurt, running towards the north-east, the horizon was often adorned with the most beautiful Fata Morgana. This phenomenon is undoubtedly to be seen in the greatest perfection in the hot, but dry, atmosphere of the deserts of Central Asia, and affords the most splendid optical illusions which one can imagine. I was always enchanted with these pictures of cities, towers, and castles dancing in the air of vast caravans, horsemen engaged in combat, and individual gigantic forms which continually disappeared from one place to reappear in another. As for my nomad companions, they regarded the neighbourhoods where these phenomena are observed with no little awe. According to their opinion these are ghosts of men and cities which formerly existed there, and now at certain times roll about in the air."

Sleep and Dreams—Since I issued the number which contains Chapter X., my attention has been drawn by a subscriber to a remarkable survival of the primitive idea that the soul leaves the body during sleep. It is described at p. 56 of a work on *The British Jews*, by the Rev. John Mills.

"Sleep is looked upon as a kind of death, when the soul departs from the body, but is restored again in awaking. Therefore the Jew is expected, when he awakes, to repeat as follows—'I acknowledge before thee, the living and everlasting King, that thou hast returned my soul to me in thy great mercy and faithfulness.' * * * Whilst asleep, when the soul is departed from the body, evil spirits, according to popular opinion, have rested upon it, consequently, immediately upon rising, he must wash his hands and face—a kind of purification—to cleanse himself from all impurities of this minor death."

Reviving Corpses—The Eyrbyggja-Saga shows that among our Scandinavian ancestors there prevailed the primitive notion that the material body, re-animated by its wandering double, can leave its burial-place and work mischief. Here is the condensed passage—

"After the death of Arakell, Bægfot became again troublesome, and walked far from his tomb to the great terror and damage of the neighbourhood, slaying both herds and domestics, and driving the inhabitants from the canton. It was, therefore, resolved to consume his carcase with fire, for * * * he, or some evil demon in his stead, made use of his mortal reliques as a vehicle during commission of these enormities. The body was burnt."

Noting the implied belief, like that which we have found prevalent among the savage and semi-civilized, that destruction of the body prevents this kind of resurrection, we may especially mark the further implied belief, also illustrated in other cases, that one who gets part of a dead body thereby gets power over the deceased person, for if destruction of the whole paralyzes the ghost entirely, injury of a part must be detrimental to the ghost.

Sorcery—The relation of the foregoing belief to those practices by which magicians are supposed to raise the dead and control demons, was suggested in § 133. Further proofs that the more-

developed forms of sorcery thus originate, have since come to light. The following passage from Sir George Grey's *Polynesian Mythology*, pp 114-5, implies the anxiety of a son to rescue relics of his father from enchanters

"Rata, without stopping, crept directly towards the fire, and hid himself behind some thick bushes of the Harakeke, he then saw that there were some priests upon the other side of the same bushes, serving at the sacred place, and, to assist themselves in their magical arts, they were making use of the bones of Wahieroa, knocking them together to beat time while they were repeating a powerful incantation, & * * * he rushed suddenly upon the priests * * * The bones of his father, Wahieroa, were then eagerly snatched up by him, he hastened with them back to the canoe "

From pp. 34-5 of the same work, I quote another passage, similarly implying the power which possession of a relic gives —

"When the stomach of Muri-ranga-whenua had quietly sunk down to its usual size, her voice was again heard saying, 'Art thou Maui?' and he answered, 'Even so' Then she asked him, 'Wherefore hast thou served thy old ancestress in this deceitful way?' and Maui answered, 'I was anxious that thy jawbone, by which the great enchantments can be wrought, should be given to me' She answered, 'Take it, it has been reserved for thee' And Maui took it, and having done so returned to the place where he and his brethren dwelt "

When with these, and other such illustrations before given, we join the fact that even still in Italy the people tell of the child that is "kidnapped and buried up to the chin, while the witches torment him to death to make *hell-broth of his liver*" (*Fortnightly Review*, Feb., 1873, p 220), we cannot, I think, doubt that necromancy, starting with the primitive belief that the spirit of the living person, inhering in all parts of his body, is affected by acting on a detached part of his body, and advancing to the belief that the spirit of the dead person is similarly affected by maltreating a relic, is enforced by the belief that all parts of the body will eventually be needed by the deceased, and that therefore his spirit can be commanded by one who has any part.

Since putting the above paragraphs in the printer's hands, I have met with evidence even more strongly confirming this view. It is contained in a just-published work, *Tales and Traditions of the Eskimo*, by Dr. Henry Rink, translated from the Danish by the author, and edited by Dr. Robert Brown. The following extracts I place in an order which shows their bearings —

"Some tales seem to hint at a belief that the manner in which the body of the deceased is treated by the survivors influences the condition of his soul"—P 43 "But a slain man is said to have power to avenge himself upon the murderer by *rushing into him*, which can only be prevented by eating a piece of his liver"—P 45 And then, among the materials necessary for sorcery, are named, *first*, "parts of human bodies, or objects that had been in some way connected with dead bodies"—P 49

Here we have the three concurrent ideas—effect on the ghost by action on the body belonging to it, protection against the ghost by

incorporating part of the body, and so establishing community; and coercion of the ghost by treating part of the body injuriously.

Supernatural Agents.—In § 118 I suggested that the water-spirt was originally the ghost of a drowned person, supposed to haunt the place of death, and to be characterized by the malice habitually ascribed to ghosts which have not been propitiated by the usual funeral sacrifices. I had then met with no fact supporting this inference; but the work of Mr. Bancroft on the *Native Races of the Pacific States* has since furnished me with one

“Leaving this locality and subject, I may remark that the natives have named the Póhono Fall, in the same valley, after an evil spirit, many persons having been swept over and dashed to pieces there. No native of the vicinity will so much as point at this fall when going through the valley, nor could anything tempt one of them to sleep near it, for the ghosts of the drowned are tossing in its spray, and their wail is heard forever above the hiss of its rushing waters.”—See vol. III, p. 126

Fetichism —I believe M. Comte expressed the opinion that fetichistic conceptions are formed by the higher animals. Holding, as I have given reasons for doing, that fetichism is not original but derived, I cannot, of course, coincide in this view. Nevertheless, I think the behaviour of intelligent animals elucidates the genesis of it. I have myself witnessed in dogs two illustrative actions

One of these actions was that of a formidable beast, half mastiff, half bloodhound, belonging to friends of mine. While playing with a walking-stick which had been given to him, and which he had seized by the lower end, it happened that in his gambols he thrust the handle against the ground, the result being that the end he had in his mouth was forced against his palate. Giving a yelp, he dropped the stick, rushed to some distance from it, and betrayed a consternation which was particularly laughable in so large and ferocious-looking a creature. Only after cautious approaches and much hesitation was he induced again to lay hold of the stick. This behaviour showed very clearly the fact that the stick, while displaying none but properties he was familiar with, was not regarded by him as an active agent, but that when it suddenly inflicted a pain in a way never before experienced from an inanimate object, he was led for the moment to class it with animate objects, and to regard it as capable of again doing him injury. Similarly in the mind of the primitive man, knowing scarcely more of natural causation than a dog, the anomalous behaviour of an object previously classed as inanimate, suggests animation. The idea of voluntary action is made nascent; and there arises a tendency to regard the object with alarm lest it should act in some other unexpected and perhaps mischievous way. The vague notion of animation thus aroused, will obviously become a more definite

notion, as fast as development of the ghost-theory furnishes a specific agency to which the anomalous behaviour can be ascribed.

A very intelligent and good-tempered retriever, much petted in the house of certain other friends, had a habit which yields the second hint I have alluded to. On meeting in the morning, or after an absence of some hours, one with whom she was on friendly terms, she joined with the usual wagging of the tail, an unusual kind of salute, made by drawing apart the lips so as to produce a sort of smile or grin, and she then, if out of doors, proceeded to make a further demonstration of loyalty. Being by her duties as a retriever led to associate the fetching of game with the pleasing of the person to whom she brought it, this had become in her mind an act of propitiation, and so, after wagging her tail and grinning, she would perform this act of propitiation as nearly as was practicable in the absence of a dead bird. Seeking about, she would pick up a dead leaf or other small object, and would bring it with renewed manifestations of friendliness. Some kindred state of mind it is which, I believe, prompts the savage to certain fetichistic observances of an anomalous kind. Occasionally, when seeking supernatural aid, the savage will pick up perhaps the first stone he sees, paint it red, and make offerings to it. Anxious to please some ghostly agent, he feels the need for displaying his anxiety, and he adopts this as the nearest fulfilment of a propitiatory act which circumstances permit. Ghosts are all about, and one may be present in anything—perhaps in this stone, very likely in this stone. And so the primitive man, with whom fancy passes easily into belief, adopts this method of expressing his subordination. Daily occurrences among ourselves prove that the desire to *do something* in presence of an emergency, leads to the most irrelevant actions. “It may do good, and it can do no harm,” is the plea for many actions which have scarcely more rationality than worship of a painted stone.

The Fetich-ghost.—The evidence given in §§ 159—163 that the supernatural agent supposed to be contained in an inanimate object worshipped by the savage, was originally a human ghost is, I think, tolerably conclusive as it stands. I have, however, met with still more conclusive evidence, in the work of Dr. Henry Riik on the Eskimo, named above. In the significant passage which I here extract, the two are identified by name.

“The whole visible world is ruled by supernatural powers, or ‘owners,’ taken in a higher sense, each of whom holds his sway within certain limits, and is called *inua* (viz., its or his, *inuk*, which word signifies ‘man,’ and also *owner* or *inhabitant*)”—P. 87

The supposed possessing agent to which the powers of an object are ascribed, is thus called *its man*—the man in it, that is the man’s ghost in it. The “*inue*” of certain celestial objects were persons

known by name, and the implication is that the "*umie*" of other objects are thought of as persons, but not individually identified.

Reptile-Worship.—Facts named in § 167 proved that, in various parts of the world, serpent-worship arises by identification of house-haunting snakes with returned ancestors. Some cases were added of house-haunting lizards, which acquire sacredness in the same manner, and I here append an instance since pointed out to me —

"The province of Samotigia abounds in woods and forests, in which horrible sights may occasionally be witnessed, for in them there dwell a considerable number of idolaters, who cherish, as a kind of household gods, a species of reptile, which has four short feet like a lizard, with a black flat body, not exceeding three palms in length. These animals are called 'givoites,' and on certain days are allowed to crawl about the house in search of the food which is placed for them. They are looked upon with great superstition by the whole family, until the time when, having satisfied their hunger, they return to their own place"—Herberstein, *Res Moscovit* (Major's translation)

Lotus-worship.—I have not included in the chapter on plant-worship the case of the lotus, because I did not wish to endanger the general argument by a doubtful support. The evidence is, however, sufficient to raise the suspicion that lotus-worship arose in the same way as did the worship of the soma.

Clearly some plant, or the product of some plant, having that name, was eaten as a nervous stimulant, producing a state of blissful indifference, though among sundry plants which have gone by the name it is not decided which was the one. Further, there was in the East the belief in a divinity residing in a water-plant known as the lotus; and at the present time in Thibet, worship of this divinity in the lotus is the dominant religion. As is stated in Mr. Wilson's *Abode of Snow*, the daily and hourly prayer is "Om mani padme haun," which literally rendered means, "O God! the jewel in the lotus. Amen." The word *manu*, here translated jewel, and meaning more generally a precious thing, is variously applied to sacred objects—to the long stone tumuli, to the prayer-mills, etc.—so that, reading through the figurative expression to the original thought, it would seem to be "O God! the precious or sacred power in the lotus." Difficulties in explaining the ancient legend about lotus-eating, as well as this existing superstition, arise from the fact that the plant now known as the lotus, has no toxic qualities. There is, however, a possible solution. The lotus has a sweet root, and at the present time in Cashmere, this root is hooked up from the bottoms of the lakes and used as food. But a sweet root contains fermentable matters—both the saccharine and the amylaceous even now alcohol is made from beetroot. Possibly, then, in early times the juice and starch of the lotus-root were used, just as the sap of the palm is in some places used still, for making an intoxicating beverage, and the beliefs concerning the lotus may

have survived in times when this beverage was replaced by others more easily produced. The fact that in the early days of Soma-worship the juice was fermented, but that in later days it was not (other kinds of intoxicating liquors having come into use), yields additional reason for thinking so. Be this as it may, however, we have this evidence—some plant yielding a product causing a pleasurable mental state was identical in name with a plant regarded as sacred because of an indwelling god.

It is, indeed, alleged that in Egypt the lotus was sacred as a symbol of the Nile, and that the Indian lotus stood in like relation to the Ganges. I notice this interpretation for the purpose of remarking that I do not believe any early usage ever arose through symbolization. This is one of the many erroneous interpretations which arise by ascribing developed ideas to undeveloped minds. No one who, instead of fancying how primitive usages could have arisen, observes how they do arise, will believe that the primitive man ever *deliberately* adopted a symbol, or ever even conceived of a symbol as such. All symbolic actions are modifications of actions which originally had practical ends—were not invented but grew. The case of mutilations sufficiently exemplifies the process.

Men in the Sky—Already the Esquimaux have furnished in the text an illustration of the primitive belief that stars, etc., were originally men and animals who lived on the earth (§ 190). In the above-cited work of Dr Rink I find a circumstantial account of their ideas concerning the physical connexion between the upper and lower worlds, and the routes joining them.—

“The earth, with the sea supported by it, rests upon pillars, and covers an under world, accessible by various entrances from the sea, as well as from mountain clefts. Above the earth an upper world is found, beyond which the blue sky, being of a solid consistence, vaults itself like an outer shell, and, as some say, revolves around some high mountain-top in the far north. The upper world exhibits a real land with mountains, valleys, and lakes. After death, human souls either go to the upper or to the under world. The latter is decidedly to be preferred, as being warm and rich in food. There are the dwellings of the happy dead called *avisssut*—viz., those who live in abundance. On the contrary, those who go to the upper world will suffer from cold and famine, and these are called *arssarbut*, or ball players, on account of their playing at ball with a walrus head, which gives rise to the aurora borealis, or northern lights. Further, the upper world must be considered a continuation of the earth in the direction of height, although those individuals, or at least those souls temporarily delivered from the body, that are said to have visited it, for the most part passed through the air. The upper world, it would seem, may be considered identical with the mountain round the top of which the vaulted sky is for ever circling—the proper road leading to it from the foot of the mountain upwards being itself either too far off or too steep. One of the tales also mentions a man going in his kayak [boat] to the border of the ocean, where the sky comes down to meet it”—pp 37-8

“The upper world is also inhabited by several rulers besides the souls of the deceased. Among these are the owners or inhabitants of celestial bodies,

who, having once been men, were removed in their lifetime from the earth, but are still attached to it in different ways, and pay occasional visits to it. They have also been represented as the celestial bodies themselves, and not their *moes* only, the tales mentioning them in both ways. The owner of the moon originally was a man, called Aningaut, and the *mua* of the sun was his sister * * * The *erdlaveersissok*—viz., the entrail-seizer—is a woman residing on the way to the moon, who takes out the entrails of every person whom she can tempt to laughter. The *siagtut*, or the three stars in Orion's belt, were men who were lost in going out to hunt on the ice"—pp 48-9

There could scarcely be more specific evidence that the personalization of heavenly bodies has resulted from the supposed translation of terrestrial beings—men and animals—to the sky. Here we have the upper world regarded as physically continuous with the lower world and like it in character, and the migration to it after death parallels those migrations to distant parts of the earth's surface after death, which primitive races in general show us. While we have no evidence of nature-worship, we have clear evidence of identification of celestial bodies with traditional persons. That is to say, personalization of the heavenly bodies *precedes* worship of them instead of *succeeding* it, as mythologists allege. Joining these facts with those given in the text, the origin of names for constellations and the genesis of astrology, are made, I think, sufficiently clear

Star-Gods.—While the proofs of these pages are under correction, I am enabled to add an important piece of evidence, harmonizing with the above, and supporting sundry of the conclusions drawn in the text. It is furnished by a Babylonian inscription (ni. Rawl 53, No 2, lines 36, etc.), which, as translated by Prof. Schrader, runs thus —

“ The star Venus at sunrise is Ishtar among the gods,
The star Venus at sunset is Baaltis among the gods ”

We have thus another case of multiple personality in a heavenly body, analogous to the cases of the Sun and Moon before pointed out, but differing in definiteness. For whereas, before, the belief in two or more personalities was inferred, we here have it directly stated. This belief, inexplicable on any current theory, we see to be perfectly explicable as a result of birth-naming.

Other-Worlds —The speculation ventured in § 113, that conquest of one race by another introduces beliefs in different other worlds, to which the superior and the inferior go, is supported by this passage:—

“ If there are strong caste-distinctions, the souls of the noble and chief men are said to go to a better country than those of the rest. It is for this reason that in Cochin China common people do not entertain the souls of their friends on the same day of the All Souls' feast as that on which the nobility have in-

vited theirs; because otherwise those souls when returning would have their former servants to carry the gifts received"—*Bastian, Vergl. Psychologie*, 89.

Mountain Deities.—In § 114 I suggested two ways in which ancestor-worship originates beliefs in gods who reside on the highest peaks and have access to the heavens. Burial of the dead on mountain crags, I indicated as one origin, and the occupation of mountain strong-holds by conquering races, as probably another origin. I have since met with verifications of both suggestions.

The first of them is contained in the recently published *Travels in the Philippines*, by F. Jagor. Showing that before the Spanish settlement the people had the ordinary ideas and customs of ancestor-worshippers, he describes the sacred burial caves, and illustrates the survival of the religious awe with which these caves were originally regarded. He visited some of these caves at Nipa-Nipa, and says (p. 259) that "the numerous coffins, implements, arms, and trinkets, protected by superstitious terrors, continued to be undisturbed for centuries. No boat ventured to cross over without the observance of a religious ceremony, derived from heathen times, to propitiate the spirits of the caverns who were believed to punish the omission of it with storm and shipwreck." By way of proof, he tells us that the boatmen who went with the pastor of Basey to the cave to get remains, regarded a thunderstorm which broke on their way back as "a punishment for their outrage." After thus exhibiting the popular beliefs as they still exist, notwithstanding Catholic teaching, he proves, from early writers, what these beliefs originally were. It appears that men when dying often chose their burial-places, and he quotes one authority to the effect that "those who were of note" sometimes had their coffins deposited "on an elevated place or rock on the bank of a river, where they might be venerated by the pious." He says that Thévenot describes them as worshipping "those of their ancestors who had most distinguished themselves by courage and genius, whom they regarded as deities. * * * Even the aged died under this conceit, choosing particular places, such as one on the island of Leyté, which allowed of their being interred at the edge of the sea, in order that the mariners who crossed over might acknowledge them as deities, and pay them respect." And he also quotes Gemelli Careri, who says that "the oldest of them chose some remarkable spot in the mountains, and particularly on headlands projecting into the sea, in order to be worshipped by the sailors." This combination of facts is, I think, amply significant. We have distinguished persons becoming gods after death, we see them providing for this apotheosis, and in a sense demanding worship; we find them choosing high and conspicuous burial-places to facilitate the worship, we see that approach to burial-places is regarded as sacrilege, and we see that

the ghosts of the dead have become deified to the extent that they are supposed to vent their anger in thunderstorms. Here are all the elements from which might result a Philippine Sinai

The instance to which I refer as showing that an invading race, seizing a high stronghold, may give origin to a celestial hierarchy, whose residence is a mountain top, I take from Bancroft's version of the Quiché legend. It begins with a time when as yet there was no Sun (possibly a fragment of some still more ancient story brought southwards by dwellers in the Arctic regions); and in the first place narrates a migration in search of the Sun.

"So the four men and their people set out for Tulán-Zuiva, otherwise called the Seven-caves or Seven-ravines, and there they received gods, each man as head of a family, a god, though inasmuch as the fourth man, Iqí-Balam, had no children and founded no family, his god is not usually taken into account. * * * Many other trials also they underwent in Tulán, famines and such things, and a general dampness and cold,—for the earth was moist, there being as yet no sun * * * They determined to leave Tulán, and the greater part of them, under the guardianship and direction of Tohil, set out to see where they should take up their abode. They continued on their way amid the most extreme hardships for want of food * * * At last they came to a mountain that they named Hacavitz, after one of their gods, and here they rested,—for here they were by some means given to understand that they should see the sun * * * And the sun, and the moon, and the stars were now all established. Yet was not the sun then in the beginning the same as now, his heat wanted force, and he was but as a reflection in a mirror [This is explained if we suppose a southern migration] * * * Another wonder when the sun rose! The three tribal gods, Tohil, Avilix, and Hacavitz, were turned into stone, as were also the gods connected with the lion, the tiger, the viper, and other fierce and dangerous animals * * * And the people multiplied on this Mount Hacavitz, and here they built their city. * * * And they worshipped the gods that had become stone, Tohil, Avilix, and Hacavitz * * * They began to wet their altars with the heart's blood of human victims. From their mountain hold they watched for lonely travelers belonging to the surrounding tribes, seized, overpowered, and slew them for a sacrifice * * * The hearts of the villagers were thus fatigued within them, pursuing unknown enemies. At last, however, it became plain that the gods Tohil, Avilix, and Hacavitz, and their worship, were in some way or other the cause of this bereavement, so the people of the villages conspired against them. Many attacks, both openly and by ruses, did they make on the gods, and on the four men, and on the children and people connected with them, but not once did they succeed, so great was the wisdom, and power, and courage of the four men and of their deities * * * At last the war was finished * * * And the tribes humiliated themselves before the face of Balam-Quitze, of Balam-Agab, and of Mahucutah * * * Now it came to pass that the time of the death of Balam-Quitze, Balam-Agab, Mahucutah, and Iqí-Balam drew near * * * And they said, we return to our people * * * So the old men took leave of their sons and their wives * * * Then instantly the four old men were not, but in their place was a great bundle. * * * So it was called the Majesty Enveloped * * * and they burned incense before it" [Such a bundle was said 'to contain the remains of Camaxtli, the chief god of Tlascalala']—Vol. III, pp. 49-54

"*Gods and men.*"—Further grounds for taking the view expressed in § 200, respecting the "gods and men" of the Hebrew legend

has since been furnished me by the just issued *Chaldean Account of Genesis*, by Mr. George Smith. Here is the passage —

“It appears from line 18 [of the tablet] that the race of human beings spoken of is the *zalmat qaqada*, or dark race, and in various other fragments of these legends they are called Adm or Adami, which is exactly the name given to the first man in Genesis * * *

“It has already been pointed out by Sir Henry Rawlinson that the Babylonians recognized two principal races — the Adamu, or dark race, and the Sarku, or light race, probably in the same manner that two races are mentioned in Genesis, the sons of Adam and the sons of God. It appears incidentally from the fragments of inscriptions that it was the race of Adam, or the dark race, which was believed to have fallen”—pp 85 6

Verification is also hereby afforded of the suggestion made in § 178 (note) that the forbidden fruit was the inspiring and illuminating product of a plant which the conquering race forbade the subject race to consume. The objection, not unlikely to be raised, that the words “fruit” and “eating” do not countenance this interpretation, would be sufficiently met by cases of our own metaphorical uses of these words (“fruit of the womb,” “opium-eating”); but it may be met more directly. Of the Zulus, Canon Callaway says—“The natives speak of beer as food—and of eating it. They also call snuff food, and speak of eating it.”

Fijian Gods—Since writing the comparison made in § 201 between the Greek pantheon and the pantheon of the Fijians, an unknown correspondent has been good enough to forward to me a statement which bears, in an interesting way, on the question. It is contained in a parliamentary paper, *Correspondence respecting the Cession of Fiji*, presented Feb 6, 1875, p 57. This document concerns the native ownership of land, and the passage I refer to appears to be appended by way of showing how the native idea of ownership is affected by their creed —

“NOTE—Their fathers or their Gods—It may not be out of place in connection with the above memorandum to advance one or two facts with the object of showing that the head of the tribe, *i e*, its highest living male ascendant, was regarded as its father. He held absolute authority over the persons, property, and lives of his people, and both before and after death had the same reverence shown to him as to a God.

“The Fijian language makes no distinction, in terms, between the marks of respect and reverence rendered to a Chief and those rendered to a God. I will select a few words, with their meanings, from Hazelwood’s Fijian Dictionary. ‘1 Tama—a father. 2 Tama-ka—to reverence, to clap hands, or to make some expression of a God or Chief. 3 Cabora—to offer or present property to a God or to a Chief. 4 A1 sevu—the first dug yams, the first fruits, which are generally offered’ to the Gods and given to a Chief of a place. 5 Tauvu, and Veitauvu—Literally, to have the same root, or sprung from the same source, used of people who worship the same God.” * * *

“The swearing of Fijians is like that of the High Asiatic peoples. Two men quarrelling never swear at each other personally, nor even utter their respective names, they will curse their fathers, their grandfathers, and their most remote ancestry. The reason being that to curse a Fijian’s father is to curse his

God * * * The successive stages of authority among the Fijian people is first, that of the individual family, secondly, the association of many families, which constitute the Qali, and thirdly, the union of these Qalis under their recognized hereditary Chief, which constitutes the Matanitu. It is the Family, Gens, and Tribe of early history found extant, and as a system still closely observed in Polynesia at the present day."

Aryan Ancestor-worship.—The more I have looked into the evidence the more I have marvelled at those who in the interests of the mythological theory assert that the Aryans have been distinguished from inferior races by not being ancestor-worshippers; and who ascribe such ancestor-worship as cannot be overlooked to imitation of inferior races. If the American filibuster Ward, now apotheosized in China, has a temple erected to him there, the fact is accepted as not unnatural among the ancestor-worshipping Chinese. But in India, among Aryans, we must ascribe to the bad example of lower types, the erection of a temple at Benares to the English filibuster Warren Hastings —(*Parliamentary History*, xxvi., pp. 773-7).

I find nothing but such unwarranted assumption to be put against the clear evidence that ancestor-worship was dominant among primitive Aryans, long remained dominant among civilized Aryans, survived in considerable strength in mediæval Christendom, and has not yet died away. When we learn that the *Avesta* describes sacrifices for the dead, and contains prayers calling upon them—when we read in the *Institutes of Menu* (Sir W. Jones's translation, vol. iii, p. 203) that "an oblation by *Brâhmens* to their ancestors transcends an oblation to the deities, because that to the deities is considered as the opening and completion of that to ancestors"—when, turning to the Aryans who migrated West, we remember how dominant propitiation of the dead was among them, calling from Grote the words "sepulchral duties, sacred beyond all others in the eyes of a Greek"—when we are reminded how the early Romans, ascribing to their manes-gods a love of human blood, duly administered to it; our boldness of assumption must be great if we can say that Aryan ancestor-worship was not indigenous but adopted.

Were it true that necrolatry was not rooted in the primitive Aryan mind, as in other primitive minds (a marvellous difference, did it exist), it would be strange that though superficial it was so difficult to extirpate. Christianity spread without extinguishing it in a capitulary of 742 Karloman prohibits "sacrifices to the dead." Nor has it been extinguished by modern Christianity, as was shown in § 152. Here is further evidence from Hanusch, *Slavischer Mythos*, p. 408:—

"According to Gebhardt the Misnians, Lausitzians, Bohemians, Silesians, and Poles, upon the first of March early in the morning went forth with torches, going to the cemetery and offering up food to their ancestors. According to Grimm, the Esthonian leave food for the dead in the night of the

second of November, and are glad if in the morning something is found to be consumed * * * With all Slaves it was a custom to have a meal for the dead not only upon the day of funeral but annually, the former was intended for the particular dead, the latter for the dead in general * * * At the latter they believed the souls to be present personally. Silently little bits of food were thrown for them under the table. People believed they heard them rustle, and saw them feed upon the smell and vapour of the food."

I may close with the conclusive testimony of one who has had unusual opportunities of studying Aryan superstitions as now being generated, and whose papers in the *Fortnightly Review* show how competent he is both as observer and reasoner—Mr. A. C. Lyall. In a letter to me he says—"I do not know who may be the author of the statement which you quote at p. 313, that 'No Indo-European nation seems to have made a religion of the worship of the dead,' but it is a generalization entirely untenable. Here in Rajputana, among the purest Aryan tribes, the worship of famous ancestors is most prevalent, and all their heroes are more or less deified."

Religion of the Iranians—Just when going to press with this Appendix, my attention has been drawn by Dr. Scheppig to some extremely important facts contained in the work of Fr. Spiegel, *Eränsche Alterthumskunde*, vol. II. (1873), pp. 91, etc. While affording the needful verification of the statement above made concerning ancestor-worship in the *Zend-Avesta*, it affords highly significant evidence concerning the ideas of ghosts (*fravashis*) and of ghost-mechanism throughout creation, which were held by the Persian branch of the Aryans.

Nature of the Fravashi.—(p. 92) "The *fravashis* in the first place a part of the human soul. In this sense the word is used in the Avesta. Later works of the Parsees give us more exact information about the activity of the *fravashi*. The *frohar* or *fravashi*—so it is stated in one of those works, the *Sadder Bundeheesh*—has the task of making useful what a man eats, and removing the heavier parts. Accordingly, the *fravashi* is the part intermediating between body and soul, but it is conceived as a person, independent in general, and particularly from the body. The *Sadder Bundeheesh* recognizes other psychic powers besides the vital power (*jân*), the conscience (*akho*), the soul (*revân*), the consciousness (*bôî*). Of these the vital power is so intimately connected with the body that the latter perishes as soon as the former has vanished. In a body thus doomed to perish the other psychic powers cannot stay either. They leave it, the conscience, because it has not done anything wrong, makes straightways for heavens, while soul, consciousness, and *fravashi* remaining together, have to answer for the deeds of the man and are rewarded or punished."

Fravashis of Gods and Men.—(p. 94) "Every living being has a *fravash*, not only in the terrestrial but in the spiritual world. Not

even Ahura-Mazda [the chief god] is excepted, his *fravashî* is frequently alluded to (Vd. 19, 46, Yt 13, 80) as well as the *fravashîs* of the Amesha-çpentas and the other Yazatas (Yç 23, 3, Yt 13, 82). Most frequently the *fravashîs* of the Paouryôtkæshas are invoked, *i.e.*, those of the pious men who lived before the appearance of the law. To them, generally, the *fravashîs* of the nearest relations, and the *fravashî* of the person himself, are added . . . It may appear surprising that the *fravashîs* of the 'born and unborn' are invoked (Yç 26, 20). The clue may be found in Yt. 13, 17, where it is stated that the *fravashîs* of the pious who lived before the law, and of the beings who will appear in future, are more powerful than those of other people, living or dead. Here worship of manes and of heroes is mixed up. Among these *fravashîs* the ancestors of the particular family, and of the particular clan or tribe, were worshipped." (p. 97.) "The preceding facts are taken from the Avesta. In the western monuments the name of the *fravashîs* does not occur. I have, however, no doubt that their authors were acquainted with them. In my opinion they correspond with the clan deities (*vithubis bagaubs*) mentioned several times by Darius in his inscription H, those again are the *θεοὶ πατρίοι* of the ancients."

Powers of the Fravashîs—(p. 95) "The *fravashîs* were not deficient in power. Their chief task was the protection of living beings. It is by their splendour and majesty that Ahura-Mazda is enabled to protect the Ardviçûra Anâhita (Yt 13, 4) [a certain spring and a goddess], and the earth on which the water runs and the trees grow. The *fravashîs* protect, as well, the children in the womb. . . They are very important for the right distribution of terrestrial benefits. It is by their assistance that cattle and draught beasts can walk on the earth, and but for their help sun, moon, and star, as well as the water, would not find their way, nor would the trees grow (Yt 13, 53, etc.) (p. 96) Accordingly, the peasant will do well to secure the assistance of these important deities. The same holds true for the warrior, for the *fravashîs* are helpers in battles, Mithra, Rashun, and the victorious wind are in their company. It is of great importance that the *fravashîs* remain in close connection with their families. They demand water for their clans, each one for his kin, when it is taken out of the Lake Vourukasha; . . . each of them fights on the spot where he has got to defend a homestead, and kings and generals who want their help against tormenting enemies, must specially call on them; they then come and render assistance, provided they have been satisfied and not offended (Yt 13, 69-72). The *fravashîs* give assistance not only as warriors, they may be invoked against any thing frightening, against bad men and bad spirits."

Fravashîs and Stars.—(p. 94). "We read in the Mînô-khîred: 'All the innumerable stars which are visible are called the *fravashîs*

of the terrestrial ones [men?], because for the whole creation, created by the creator Ormuzd, for the born and the unborn, a *fravashi* of the same essence is manifest' Hence it appears that the *fravashus*, or the stars, form the host that . . . fights against the demons " . . .

Worship of the *Fravashis* —(p 97). "As in the case of other genui of the Zoroastrian religion, much depends on the satisfactory propitiation of the *fravashus*, for their power, and consequent activity, depends on the sacrifices. Probably they were worshipped upon the 19th day of each month. Their chief feasts, however, were on the intercalatory days added to the year at its termination. About that time the *fravashus* descend to the earth, and stay there for 10 nights, expecting to be met with appropriate sacrifices of meat and clothes (Yt. 13, 49) [Compare with the German and Slavonian superstitions] There cannot be any doubt that the worship of the *fravashus* played an important part with the Iranians, though perhaps more in private than in public. It would appear that there were two different sorts of it. General, certainly, was the hero-worship—the veneration of the *Paoiryôtkaeshas* [pious men before the law] With this, in some ages perhaps, the worship of *fravashus* of the royal family was combined. The ancestor-worship, on the other hand, was of a strictly private character "

Ayran Analogies —(p 98). "The custom of honouring the memory of ancestors by sacrifices would appear to have been characteristic of the Indo-Germans from the very first. It is for this reason that quite striking similarities are found in the cult, which no doubt refer to very olden times. It has been justly pointed out that, as the *fravashus* are conceived as stars, so, in the opinion of the ancient Hindoos, the blessed men beam in form of stars (see *Justi, Wörterbuch, s v., fravashi*). Nor should it be overlooked that this star-worship is very like the worship of the heavenly host mentioned in the Old Testament "

Here, then, concerning these ancient Aryans of Persia, we have, on the highest authority, statements distinctly proving a dominant ancestor-worship; and also yielding support to various of the doctrines set forth in Part I. While one of the several souls possessed by each individual (and we have seen that various savages believe in two, three, and even four souls—shadow, reflexion, breath, heart) the *fravashi* is the predominant and propitiated ghost. It is supposed to need food, like the other-self of the dead savage. Not ordinary men only, but deities, up to the supreme one, have each his ghost, implying that he was originally a man. There is god and the "spirit of god", as among the Hebrews. We see, too, that these *fravashus* which are ancestral ghosts, become the agents to whom the powers of surrounding objects are ascribed—fétich-ghosts. We see that they have peopled the heavens—have

become the in-dwelling agents of sun, moon, and stars. And we see that worship of them, beginning with worship of those of the family and clan, originates in time the worship of more conspicuous traditional persons as ancient heroes and gods, just as among the Fijians and others at the present time.

Medieval Anthropomorphism.—I append part of the Old-French verses referred to in § 203, which have been pointed out to me by Mr. Collier. They narrate how God went to Arras to take lessons in song-writing (*Diex voloit d'Arras les motès aprendre*), how he fell ill, and how he was cured by laughing at a *trouvère*.—

Quant Diex fu malades, por lui rehartier
A l'ostel le prince se vint acointier,
Compaignons manda por estudier
Pouchins, li ainsnés, ki bien set raisnier
De compleusion, d'astrenomuer,
Je vi k'il fist Diu le couleür caugier,
Car encontre lui ne se sènt aidier

* * * * *

Bretiaus s'est vanté k'a Diu s'en ira,
Plus que tout li autre l'esbaniera
Il fist le paon, se brail avala,
Celui de Beugin trestout porkia.
Diex en eut tel joie, de ris s'escreva,
De se maladie trestous respassa

Or est Diex waris de se maladie
Gares vint laiens, ce fu vilenie,
Et Baudes Becons, ki met s'estudie
En trufe et en vent et en merderie.
De leur mauvaisté Diex se regramie,
Que se grans quartaine li est renforcie

—Monmerqué et Michel, *Théâtre Français au Moyen Age*, pp 22-3

ADDENDA.

Confusion of Dreams and Realities—Light is thrown by many daily experiences on the genesis of primitive ideas, if we do but note their significance. Occasionally we hear it remarked of dreams that their seeming actuality affected the feelings for some time after awakening: an impression like that, say, of escape from real danger, continuing after recognition of the fact that the danger was ideal. The tendency of an extremely vivid dream thus to generate an emotion such as accompanies reality not unfrequently leads to belief in its reality. Since the passages of the foregoing Appendix were put together and stereotyped, I have met with striking proofs of this. In a company of less than a dozen persons, three testified to having in childhood had such vivid dreams of flying down stairs, and being impressed so strongly with the experiences as real, that they actually tried to fly down stairs, and one of them suffered from an injured ankle consequent on the attempt.

Now if dream-experiences and waking experiences can be thus confounded by children among ourselves, notwithstanding the discriminations which they have heard made by adults, notwithstanding the use of words implying the contrast, and notwithstanding the conception that has been given to them of mind as an indwelling entity distinct from body, it is obvious that primitive men, lacking this theory of mind, lacking words in which to express many perceivable distinctions, and lacking, too, instruction from the more cultivated, at the same time that they are without such organized knowledge as serves to check credulity, will inevitably make this confusion between dream-thoughts and the thoughts of the waking state. Hence on reading of savages, as for instance the Kamtschadales, that the ideas of sleeping and waking life are apt to be confounded by them, we shall see that, so far from being anomalous, a confounding of them to a greater or less extent is at first inevitable. We shall see that those beliefs in the reality of dream-adventures and of the beings seen in dreams, which we have everywhere found among the uncivilized, inevitably arose; that the notion of a wandering other-self necessarily followed, and that so this germ of all superstitions was certain to evolve.

Animal-naming among the Semites—In vol. i., p. 126, Palgrave, referring to an Arab, writes —“Obeyd, ‘the wolf,’ to give him the name by which he is commonly known, a name well earned by his unrelenting cruelty and deep deceit.” Now read the following from the *Book of Judges*, vii 25.—“And they took two princes of the Midianites, Oreb [raven] and Zeeb [wolf], and they slew Oreb upon the rock Oreb, and Zeeb they slew at the winepress of

Zeeb, and pursued Midian, and brought the heads of Oreb and Zeeb to Gideon on the other side Jordan." Here then we have proof that Semitic chiefs bore animal-names. With this we may join the fact that at the present time "the Cabyles are said to distinguish their different tribes by figures of animals tatooed on forehead, nose, temples, or cheeks." (*L Geiger, Zeitschr D. M. G.* 1869, p. 169) And here are extracts concerning the Ancient Assyrians, similarly showing how names of animals became human names—"The Assyrian *lu limu* (buck) is occasionally used to denote the king." (*Delitzsch, Thurnamen*, p 51.) "[Accadian] *Ma-ru-u*, wolf (?) * * * is certainly identical with Assyrian *ma-ru-u*, male, male child. It perhaps denotes an animal as male *par excellence*, just as Aram, *dekar*, means 'man' and 'ram,' the post-biblical gēbēr 'man' and 'cock.' In Arabic too [a certain word] means man and wolf." (*Delitzsch, Thurnamen*, p 60) When we put this evidence side by side with that given in §§ 170-4, showing how animal-naming among savages leads to belief in animal-ancestors and to the propitiation of animals, it becomes still more manifest that among these Mesopotamian peoples, animal-gods and gods half-man half-brute, originated in the way alleged

The Snake-Spirit among the Ancients—A remarkable verification of the view set forth in §§ 167—8, is furnished by the following passage from the *Æneid*, v 75.

"Æneas went from the assembly to the tomb [of his father] * * * Here in due form, by way of libation, he pours on the ground to Bacchus two bowls of wine, two of new milk, two of sacred blood, then scatters blooming flowers, and thus speaks—Hail, holy sire! once more hail, ye ashes * * * ye ghosts and shades of my father! * * * He said, when from the bottom of the shrine a huge slippery snake trailed along * * * gently twining round the tomb, and gliding over the altars. * * * Æneas stood amazed at the sight At length the reptile * * * gently tasted the banquet, and harmless retired again into the bottom of the tomb, and left the altars on which he had fed Æneas with the more zeal pursues the sacrifice begun in honour of his father, in doubt whether to think it the genius of the place, or the attendant of his parent"

Though here, along with the conceptions of a higher stage than that described in §§ 167—8, there is not distinct identification of the snake with the ancestral ghost, some connexion between them is supposed. That a creature found in the place of the dead, or in a place supposed to be visited by the dead, is assumed to belong in some way to the dead, need no longer be entertained as an hypothesis; for here the assumption is expressed That among the possible relations between the tomb-haunting animal and the deceased person, metamorphosis will be supposed by early peoples, is clear. And that hence results the identification of owls and bats (and possibly *scarabææ*) with souls, can no longer be doubted.

Beliefs of the Accadians.—The distinguished Assyriologist, the

Rev A. H Sayce, in his article on the Accadians in the new edition of the *Encyclopædia Britannica*, writes as follows.—

"The earliest religion of Accad was a Shamanism resembling that of the Siberian or Samoyed tribes of to-day. Every object had its spirit, good or bad, and the power of controlling these spirits was in the hands of priests and sorcerers. The world swarmed with them, especially with the demons, and there was scarcely an action which did not risk demoniac possession. Diseases were regarded as caused in this way * * *. In course of time certain spirits (or rather deified powers of Nature) were elevated above the rest into the position of gods * * *. The old Shamanism gradually became transformed into a religion, with a host of subordinate semi divine beings, but so strong a hold had it upon the mind, that the new gods were still addressed by their spirits. The religion now entered upon a new phase, the various epithets applied to the same deity were crystallised into fresh divinities, and the sun-god under a multitude of forms became the central object of worship."

Now though Mr. Sayce espouses the theory of the mythologists concerning the origin of Nature-worship, it seems to me that this description tallies much better with the theory I have opposed to it. The earliest stage indicated is that in which ghosts, originally human, have become identified with various surrounding objects, as we saw they everywhere tend to do; and just as among the Esquimaux and others, Sun and Moon thus come to be residences of particular ghosts, so with the Accadians. As described by Mr Sayce, this Accadian Nature-worship, instead of being primordial, was developed out of ghost-worship.

Origin of Egyptian Gods—Amid incongruities, the general meaning of the passages which follow is sufficiently clear. The first is from Eusebius, *Aim Chron*, p 93 (ed. Mai).—

"From the Egyptian monuments of Manetho, who distributed his history into three books. On gods and on heroes, on manes, and on mortal kings who ruled over Egypt down to the Persian King Darius. The first man [*god*] with the Egyptians was Vulcanus, who is praised as the inventor of fire * * *. After the gods ruled heroes * * * and again other kings * * * and other 30 *Memphitic kings* * * * and again other 30 *Thinite kings* * * *. These followed the domination of the manes and heroes."

Whether, as supposed by some, the dynasties marked in italics have crept in by mistake (*Lauth*, p 31), or whether they are, as others think, local dynasties, the general filiation of gods, heroes, and kings is otherwise manifest. Bunsen says (*Egypt*, 1, pp. 70—1):—

"The expression, 'Reign of Manes and Heroes,' is inaccurate, for the Heroes immediately succeed the Gods. Eusebius, after mentioning Bitys, introduces the former with these words 'After the Gods, the Heroes ruled 1255 years'. And this must necessarily be the proper order, for the term, Manes, implies Mortals. It is difficult, in fact, to discover the old Egyptian idea conveyed by the expression, Heroes. Heroes, in the strict sense of the word, that is to say, Sons of God born of mortal mothers, were, as we learn from Herodotus, confirmed by the Egyptian monuments, entirely unknown to this people. The expression is used, therefore, in the sense of Demi-Gods. This same expression occurs in the extracts of the historical period, in the opening of which it is said that the reign of Manes succeeded that of the 'Manes and Demi-Gods.' The Manes seem to have represented such kings

- of the primeval time, as were strictly speaking classed as mortal, but who nevertheless were held in peculiar respect from being the ancestors of individual tribes, as the Pittrus were of the Indians for example”

On this question Brugsch writes in his *Histoire d'Égypte*, 1, p 23 :—

- “The Egyptians supposed that three ages preceded the time of their first king. The first, in their fancy, was that of the dynasty of the gods, the second the dynasty of the demi-gods, the third that of the Manes * * *. Unfortunately the fragments of the papyrus of Turin, which contains a chronological list of the Egyptian kings, have not preserved conceptions of the royal divinities of either of them. One fragment, however, dimly shows that the sacred animals (such as the bulls Apis, of Memphis, and Mnevis, of Heliopolis), belonged to those divine dynasties”

The continuity of the series from these early divine personages, some of them figured as animals and half-animals, down to gods who were unquestionably deified men, is further shown by the following passage from Bunsen's *Egypt*, 1, p 69 .—

“Eusebius calls the last of the rulers who succeeded the Great Gods—but whom he omits more nearly to specify—Bytis. According to Jamblichus (*De Mysteriis*, viii, 5, ix, 7), Bitys (or Bitis, which is clearly the same name), was a prophet of Ammon, the King—*i e*, Hyk, Ammon's peculiar title. He interpreted the religious books of Hermes. Here we have a being compounded of the Demi-God, the Hero, and the Prophet. Hermes-Thoth, decidedly an Egyptian God, was also the interpreter of the Divine Word, and the minister and assistant of Ammon.”

And then, completing the proof, we have the fact that to the worship of those earliest rulers whose vague personalities, surviving from remote times, had become gods proper, there was joined a worship of early historic kings, which, similar in nature, similarly lasted through many ages. Here is a passage from Maspero's *Une Enquête Judiciaire à Thèbes*, pp 62—3 —

“A Memphis on trouve, jusque sous les Ptolémées, des prêtres de Ménès, d'Ata, de Sakhra et d'autres pharaons appartenant aux plus anciennes dynasties (*De Rougé, Étude sur les monuments qu'on peut attribuer aux six premières dynasties de Manéthon*, pp 31, 53-83), à Thèbes, le culte des Usortesen, des Ahmès, des Aménophis (voir au *Papyrus Abbott* pl 11 13, la mention d'un prêtre d'Aménophis), ou de certaines reines comme la reine *Nefer-tari* (Lieblein, *Deux papyrus, etc*, p 31, pl iii 16, Sharpe, *Eg Insc* ii), fut florissant pendant des siècles. Si nous ne savions pas chez les particuliers les indices d'une vénération aussi vivace, c'est que, dans les tombes privées, les cérémonies étaient accomplies non par des prêtres spéciaux, mais par les fils ou les descendants du défunct. Souvent, au bout de quelques générations, soit négligence, soit déplacement, ruine, ou extinction de la famille, le culte était suspendu et la mémoire des morts se perdait”

To which passage, clearly implying that the permanent worship of the dead kings was a more developed form of the ordinary ancestor-worship, I may add a confirmatory passage from De Rougé —

“Each pyramid had by its side a funeral building, a sort of temple, where were performed the ceremonies of a cult dedicated to the deified sovereigns. I have no doubt that this cult commenced during their lifetime”—(*Mém. de l'Ac. des Inscri* xxv 2, p 254)

And yet in face of such evidence, harmonizing with all the other evidences we have found, it is alleged that the early Egyptian gods were personalized powers of nature!

APPENDIX B

[*Though in the text, while setting forth that negative criticism on the mythological theory which is constituted by an opposed theory, I have incidentally made some positive criticisms, I have preferred not to encumber the argument with many of these, nor can I here afford space for a lengthened exposition of reasons for rejecting the mythological theory. What follow must be regarded as merely the heads of an argument, the elaboration of which must be left to the reader.*]

1. That a more special science cannot be fully understood until the more general science including it is understood, is self-evident, and it is a corollary that conclusions drawn from the more special cannot be depended on in the absence of conclusions drawn from the more general. Hence philological proofs are untrustworthy unless supported by psychological proofs. Not to study the phenomena of mind by immediate observation, but to study them mediately through the phenomena of language, is necessarily to introduce additional sources of error. In the interpretation of evolving thoughts, there are liabilities to mistake. In the interpretation of evolving words and verbal forms there are other liabilities to mistake. And to contemplate the mental development through the linguistic development, is to encounter a double set of risks. Though evidence derived from the growth of words is useful as collateral evidence, it is of little use by itself; and cannot compare in validity with evidence derived from the growth of ideas. Hence the method of the mythologists, who argue from the phenomena which the symbols present, instead of arguing from the phenomena symbolized, is a misleading method.

One illustration will suffice. In a lecture delivered at the Royal Institution, on March 31st, 1871, Prof. Max Muller said—"The Zulus call the soul the shadow, and *such is the influence of language* that, even against the evidence of the senses, the Zulus believe that a dead body can cast no shadow, because the shadow—or, as we should say, the ghost—has departed from it." Here the explanation is regarded as entirely linguistic. The course of thought which, among so many races, has led to identification of soul and shadow, and which has for its corollary the departure of the soul or shadow at death, is ignored. Those who have digested

the abundant evidence given in the text, will see how profound is the misconception caused

2 In another way—allied though different—does the method of the mythologists reverse the right method. They set out with the ideas and feelings possessed by the civilized. Carrying these with them they study the ideas and feelings of the semi-civilized. And thence they descend by inference to the ideas and feelings of the uncivilized. Beginning with the complex they get from it the factors of the simple. How great are the errors to be anticipated, an analogy will show. So long as biologists gathered their cardinal conceptions from much-developed organisms their interpretations were quite wrong, and they were set right only when they began to study little-developed organisms—the lower types and the embryos of the higher types. That the teeth, though rooted in the jaws, do not belong to the skeleton, but are dermal structures, is a truth which no anatomist, dealing with adult mammals only, would ever have imagined, and this is but a sample of multitudinous revelations made by examining animals in the order of ascending evolution. Similarly with social phenomena, including the systems of beliefs men have formed. The order of ascending evolution must be followed here too—the key to their beliefs can be found only in the ideas of the lowest races.

3. The distorting effect of tracing the genesis of beliefs from above downwards, instead of tracing it from below upwards, is exemplified in the postulate of Prof Max Müller, that there was at first a high conception of deity which mythology corrupted. He says that “the more we go back, the more we examine the earliest germs of every religion, the purer, I believe, we shall find the conceptions of the Deity.” Now, unless we assume that Prof Max Müller is unacquainted with such facts as are brought together in Part I., we shall here recognize a perversion of thought caused by looking at them in the wrong order. We shall be the more obliged to recognize this, on remembering that his linguistic researches furnish him with abundant proofs that men in low stages have no terms capable of expressing the idea of a Universal Power, and can therefore, according to his own doctrine, have no such idea. Lacking words even for low generalities and abstractions, it is utterly impossible that the savage should have words in which to frame a conception uniting high generality with high abstractness. Holding so unwarranted a postulate, it is very improbable that Prof. Max Müller's mythological interpretations, harmonized as we must suppose with this postulate, can be true.

4. The law of rhythm in its social applications, implies that alter-

nations of opinion will be violent in proportion as opinions are extreme. Politics, Religion, Morals, all furnish examples. After an unqualified acceptance of the Christian creed, those who inquired passed to unqualified rejection of it as an invention of priests both courses being wrong. Similarly, after belief in classic legends as entirely true, there comes repudiation of them as entirely false: now prized as historical fact, they are now thrown aside as nothing but fiction. Both of these judgments are likely to prove erroneous. Being sure that the momentum of reaction will carry opinion too far, we may conclude that these legends are neither wholly true nor wholly untrue.

5. The assumption that any decided division can be made between legend and history is untenable. To suppose that at a certain stage we pass suddenly from the mythical to the historical, is absurd. Progress, growing arts, increasing knowledge, more settled life, imply a gradual transition from traditions containing little fact and much fancy, to traditions containing little fancy and much fact. There can be no break—no marked change. Hence any theory which deals with traditions as though, before the time when they are classed as historic, they are entirely unhistoric, is inevitably wrong. It must be assumed that the earlier the story the smaller the historic nucleus, but that some historic nucleus habitually exists. Mythologists ignore this implication.

6. If we look at the ignoring of this implication under another aspect, we shall be still more startled by it. A growing society coming at length to recorded events, must have passed through a long series of unrecorded events. The more striking of such will be transmitted orally. That is to say, every early nation which has a written history, had, before that, an unwritten history, the most remarkable parts of which survived in traditions more or less distorted. If now the alleged doing of heroes, demi-gods, and deities, which precede definite history, are recognized as these distorted traditions, the requirement is satisfied. If, otherwise, we say that these are myths, then there comes the question—Where are all the distorted traditions of actual events? Any hypothesis which does not furnish a satisfactory answer to this question is out of court.

7. The nature of pre-historic legends suggests a further objection. In the lives of savages and barbarians the chief occurrences are wars. Hence the trait common to mythologies—Indian, Greek, Babylonian, Tibetan, Mexican, Polynesian, etc.—that the early deeds narrated, even including the events of creation, take the form of fightings, harmonizes with the hypothesis that they are expanded and idealized stories of human transactions. But this trait is not

congruous with the hypothesis that they are fictions devised to explain the genesis and order of Nature. Though the mythologist imagines the phenomena to be thus naturally formulated, there is no evidence that they tend thus to formulate themselves in the undeveloped mind. To see this, it needs but to ask whether an untaught child, looking at the surrounding world and its changes, would think of them as the products of battles.

.8 The study of superstitions by descending analysis instead of by ascending synthesis, misleads in another way. It suggests causes of Nature-worship which do not exist. The undeveloped mind has neither the emotional tendencies nor the intellectual tendencies which mythologists assume.

Note, first, that the ideas and feelings out of which worship *really* grows, as shown in Part I, are displayed by all forms of the undeveloped mind—by the mind of the savage, by the mind of the civilized child, by the mind of the civilized adult in its uncultured state. Dread of ghosts is common to them all. The horror the child feels when alone in the dark, and the fear of a rustic passing a churchyard by night, show us the still-continued feeling which we have found to be the essential element of primitive religions. If, then, this sentiment excited by supposed invisible beings, which prompts the savage to worship, is a sentiment conspicuous in the young and ignorant among ourselves, we may infer that if the savage has an allied sentiment prompting worship, this, also, while manifest in him, must be similarly manifest in our own young and ignorant.

So, too, with the thought-element which mythologists ascribe to the savage. The speculative tendency which they suppose causes primitive interpretations of Nature, is a tendency which he should habitually display, and which the least developed of the civilized should also display. Observe the facts under both these heads.

9. The familiar Sun excites in the child no awe whatever. Recalling his boyhood, no one can recall any feeling of fear drawn out by this most striking object in Nature, or any sign of such feeling in his companions. Again, what peasant or what servant-girl betrays the slightest reverence for the Sun? Gazed at occasionally, admired perhaps when setting, it is regarded without even a tinge of the sentiment called worship. Such allied sentiment as arises (and it is but an allied sentiment) arises only in the minds of the cultured, to whom science has revealed the vastness of the universe. Similarly with other familiar things. A labourer has not even respect for the Earth he digs, still less any such emotion as might lead him to treat it as a deity. It is true that the child may be awed by a thunderstorm and that the ignorant may look with superstitious terror at a comet; but these are not usual and orderly

occurrences. Daily experiences prove that surrounding objects and powers, however great, excite no religious emotion in undeveloped minds, if they are common and not supposed to be dangerous.

And this, which analogy suggests as the state of the savage mind, is the state which travellers describe. The lowest types of men are devoid of wonder. As shown in § 45, they do not marvel even at remarkable things they never saw before, so long as there is nothing alarming about them. And if their surprise is not aroused by these unfamiliar things, still less is it aroused by the things witnessed daily from birth. What is more marvellous than flame?—coming no one sees whence, moving, making sounds, intangible and yet hurting the hands, devouring things and then vanishing. Yet the lowest races are not characterized by fire-worship.

Direct and indirect evidence thus unite to show us that in the primitive man, there does not exist that sentiment which Nature-worship presupposes. And long before mental evolution initiates it, the Earth and the Heavens have been peopled by the supernatural beings, derived from ghosts, which really draw out his hopes and fears, and prompt his offerings and prayers.

10. Similarly with the implied thought-element. The ignorant among ourselves are unspeculative. They show scarcely any rational curiosity respecting even the most imposing natural phenomena. What rustic asks a question as to the constitution of the Sun? When does he think about the cause of the Moon's changes? What sign does he give of a wish to know how clouds are formed? Where is the evidence that his mind ever entertained a thought concerning the origin of the winds? Not only is there an absence of any tendency to inquire, but there is utter indifference when explanation is offered. He accepts these common-place things as matters of course, which it does not concern him to account for.

It is thus, also, with the savage. Even in the absence of proof it would be inferable that if the great mass of minds in our own race are thus unspeculative, the minds of inferior races must be still more unspeculative. But, as was shown in § 46, we have direct proof. Absence of rational curiosity is habitually remarked by travellers among the lowest races. That which Dr. Rink says of the Esquimaux, that "existence in general is accepted as a fact, without any speculation as to its primitive origin," is said by others in kindred ways of various rude peoples. Nay, savages even ridicule as foolish, questions about the ordinary course of Nature, no matter how conspicuous the changes displayed.

Thus the intellectual factor, too, implied by the alleged mythopœic tendency, is wanting in early stages; and advancing intelligence does not begin to manifest it until long after the ghost-theory has originated a mechanism of causation.

11. Joined with these two erroneous assumptions is the assumption, also erroneous, that the primitive man is given to "imaginative fictions." Here is another mistake caused by ascribing to undeveloped natures, the traits which developed natures exhibit. As shown in § 47 the savage is characterized by lack of imagination; and fiction, implying imagination, arises only as civilization progresses. The man of low type no more invents stories than he invents tools or processes, but in the one case, as in the other, the products of his activity evolve by small modifications. Among inferior races the only germ of that which eventually becomes literature, is the narrative of events. The savage tells the occurrences of to-day's chase, the feats of the fight that happened yesterday, the successes of his father who lately died, the triumphs of his tribe in a past generation. Without the slightest idea of making marvellous stories, he makes them unawares. Having only rude speech full of metaphor, being prompted by vanity and unchecked by regard for truth, immeasurably credulous himself and listened to by his descendants with absolute faith; his narratives rapidly become monstrously exaggerated, and eventually diverge so widely from possibility, that to us they seem mere freaks of fancy.

On studying facts instead of trusting to hypotheses we see this to be the origin of primitive legends. Looked at apart from preconceptions, the evidence (see *Descriptive Sociology*, "Æsthetic Products") shows that there is originally no mythopœic tendency; but that the so-called myth begins with a story of human adventure. Hence this assumed factor also is wanting.

12. One more supposition is made for which there is, in like manner, no warrant. The argument of the mythologists proceeds on the assumption that early peoples were inevitably betrayed into personalizing abstract nouns. Having got certain symbols for abstractions (either by evolution or else, it would seem, from roots supernaturally given), and having, by implication, got a corresponding power of abstract thinking; it is alleged that the barbarian thereupon began to deprive his verbal symbols of their abstractness. This remarkable process is one of which clear proof might have been expected, but none is forthcoming. We have, indeed, in his *Clups*, etc. (vol. i, p. 55), the assertion of Prof. Max Müller that "as long as people thought in language, it was simply impossible to speak of morning or evening, of spring and winter, without giving to these conceptions something of an individual, active, sexual, and at last personal character"; (i.e., having, somehow, originally got them without concrete meanings, it was impossible to avoid making their meanings concrete), but to establish the alleged impossibility something more than this authoritative statement is desirable. And considering that the validity of the entire theory depends on the

truth of this proposition, one might have looked for an elaborate demonstration of it. Surely the speech of the uncivilized should furnish abundant materials.

Instead, I find put in evidence certain personalizations of abstracts made by ourselves. Prof. Max Muller quotes passages in which Wordsworth speaks of Religion as a "mother," of "father Time," of "Frost's inexorable tooth," of "Winter like a traveller old," of "laughing hours." But in the first place it is to be remarked that these, where not directly traceable to the personages of classic mythology, have obviously arisen by conscious or unconscious imitation of classic modes of expression, to which our poets have been habituated from boyhood. And then, in the second place, we find no trace of a tendency for this fanciful personalization to generate beliefs in actual personalities; and unless such a tendency is proved, nothing is proved.

13. Sanskrit is, indeed, said to yield evidence of this personalization. But the evidence, instead of being direct, is remotely inferential, and the inferences are drawn from materials arbitrarily selected.

How little confidence can be placed in the mode of dealing with the language of the Vedas, may be inferred from the mode of dealing with the Vedic statements. Appeal is professedly made to the ideas of highest antiquity, as being, according to theory, freest from mythopœic corruptions. But only such of these ideas as suit the hypothesis are taken; and ideas of as high, and indeed of higher, antiquity, which conflict with it are ignored. Of numerous cases, here is one. Soma-worship being common to the Rig-Veda and the Zend-Avesta, is thereby proved to have existed before the diffusion of the Aryans. Further, as before shown (§ 178), the Rig-Veda itself calls Soma "the creator and father of the gods," "the generator of hymns, of Dyaus, of Prithivî, of Agni, of Surya, of Indra, and of Vishnu." According to this highest authority, then, these so-called Nature-gods were not the earliest. They were preceded by Soma, "king of gods and men," who "confers immortality on gods and men" the alleged sun-god, Indra, being named as performing his great deeds under the inspiration of Soma. Hence if antiquity of idea, as proved both by the direct statements of the Rig-Veda itself, and by community of idea with the Zend-Avesta, is to be taken as the test, it is clear that Nature-worship was not primordial among the Aryans.

If we look more closely at the data taken from this "book with seven seals" (which is Prof. Max Muller's name for the book from which, strangely enough, he draws such positive conclusions) and observe how they are dealt with, we do not find ourselves reassured. The word *dyaus*, which is a cardinal word in the mythological theory, is said to be derived from the root *dya*, to beam. In

his essay on "Comparative Mythology," Prof Max Muller says of it—"A root of this rich and expansive meaning would be applicable to many conceptions the dawn, the sun, the sky, the day, the stars, the eyes, the ocean, and the meadow" May we not add that a root of such various meanings, vague in proportion to their multiplicity, lends itself to interpretations that are proportionately uncertain? The like holds throughout. One of the personalized Vedic gods, inferred to have been originally a Nature-god, is the Earth. We are told that there are twenty-one Vedic names for the Earth. We also learn that these names were applicable to various other things, and that consequently "earth, river, sky, dawn, cow, and speech, would become homonyms" On which statements our comment may be, that as homonymous words are, by their definition, equivocal or ambiguous, translations of them in particular cases must be correspondingly questionable No doubt roots that are so "rich," allow ample play to imagination, and greatly facilitate the reaching desired results But by as much as they afford scope for possible inferences, by so much do they diminish the probability of any one inference.

Nor is this all The interpretation thus made by arbitrary manipulation of ill-understood materials, is made in pursuance of what seems a self-contradicting doctrine On the one hand, the ancient Aryans are described as having a speech formed from roots, in such manner that the abstract idea of *protecting* preceded the concrete idea of a *father*. On the other hand, of ancient Aryans coming after these primitive Aryans, we are told that they "could only speak and think" in personal figures—of necessity spoke, not of sunset, but of the "sun growing old"—not of sunrise, but of "Night giving birth to a brilliant child"—not of Spring, but of "the Sun or the Sky embracing the earth" So that the race who made their concretes out of abstracts, are described as led into these Nature-myths by their inability to express abstracts except in terms of concretes!

May we not say, then, that the doctrine of the personalization of abstracts, unsupported by evidence which existing races furnish, is not made probable by inferences thus drawn from ancient evidence?

14. We need not, however, leave off simply with the conclusion that the hypothesis is unsustained Happily we are furnished with a definite test, which, I think, completely disproves it.

As part of the reason why abstract nouns and collective nouns became personalized, Prof. Max Muller says—"Now, in ancient languages every one of these words had necessarily a termination expressive of gender, and this naturally produced in the mind the corresponding idea of sex." Here the implication is that the use of a name carrying with it the idea of sex in the thing

named, therefore carried with it the idea of something living, since living things alone possess the differences expressed by gender. Observe, now, the converse proposition necessarily going with this. It is implied that in the absence of a termination indicating a masculine or feminine nature in an abstract noun, any liability there may be to give more concreteness to its meaning, will not be joined with a liability to ascribe sex to it. There will be no tendency to personalize it accompanying the tendency to make it concrete; but it will become a neuter concrete. Unquestionably if a termination implying sex, and therefore implying life, therefore implies personality; where there is no termination implying sex, no implication that there is life and personality will arise. It follows, then, that peoples whose words have no genders will not personalize the powers of nature. But the facts directly contradict this inference. "There are no terminations denoting gender in Quichua," the language of the ancient Peruvians, and yet the ancient Peruvians had personalized natural objects and powers—Mountains, Sun, Moon, the Earth, the Sea, etc., and the like absence of genders and presence of Nature-worship, occurred among the Chibchas, and among the Central Americans. Thus we have undeniable proof that personalization of the great inanimate objects and agents, has no such linguistic cause as that alleged.

15. The many reasons for rejecting the interpretations which mythologists offer us, thus fall into several groups.

Some of them are *à priori*. The method adopted is doubly wrong—wrong as seeking in the characters of words, explanations which should be sought in the mental phenomena symbolized by those words, and wrong as seeking in developed thoughts and feelings the keys to undeveloped ones, instead of the converse. The assumption, associated with this method, that the human mind had originally a conception of deity such as we now call pure, is directly contradicted by the evidence which the uncivilized present; and suicidally implies that there were abstract thoughts before there was even an approach to words abstract enough to convey them.

A second group of *à priori* reasons is otherwise derived. The mythological theory tacitly assumes that some clear division can be made between legend and history, instead of recognizing the truth that in the narratives of events there is a slowly increasing ratio of truth to error. Ignoring the necessary implication that before definite history, numerous partially-true stories must be current, it recognizes no extensive group of distorted traditions of actual events. And then, instead of seeing in the common character of so-called myths, that they describe combats of beings using weapons, evidence that they arose out of human transactions, they assume that the order of Nature presents itself to the undeveloped mind in terms of victories and defeats.

Of *a posteriori* reasons for rejecting the theory, come, first, those embodied in denials of its premisses. It is not true, as tacitly alleged, that the primitive man looks at the powers of Nature with awe. It is not true that he speculates about their characters and causes. It is not true that he has a tendency to make fictions. Every one of these alleged factors of the mythopœic process, though present in the developed mind, is absent from the undeveloped mind, where the theory assumes it.

Yet further reasons are forthcoming. From premisses unwarranted by evidence, the conclusions are reached by processes which are illegitimate. It is implied that men, having originally had certain signs of abstract conceptions, and therefore power of forming such conceptions, were obliged, afterwards, to speak and think in more concrete terms—a reversal of direction not to be admitted without strong evidence. The formation of ideal persons out of abstract nouns, which is ascribed to this necessity, ought to be clearly demonstrated from the speech of existing low races, which it is not. Instead, we have deductions from an ancient Sanskrit work, unintelligible to the extent of having seven seals, from which conclusions called unquestionable are drawn by taking some statements and ignoring others, and by giving to words which have a score meanings those most congruous with the desired conclusion.

Finally comes the fact which, even were the argument in general as rigorous as it is loose, would be fatal to it—the fact that personalization of natural powers, said to be suggested by verbal terminations expressive of sex, occurs just as much where there are no such terminations.